ALBERTA

MINES BRANCH_

REPORTS 1918-20

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ANNUAL REPORT

OF

THE MINES BRANCH

OF THE

PROVINCE OF ALBERTA

1918

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EDMONTON, FEBRUARY 15, 1919.

L. C. Charlesworth, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—In accordance with the provisions of The Mines Act, I herewith submit my report of the Mines Branch for the year ending December 31, 1918.

The Mines Act, which became effective on August 1, 1913, was amended at the 1918 Session of the Legislature, the principal changes made being provisions for bringing all operations, incidental to the extraction of coal by removing the over-lying strata, within the scope of the Act, and for requiring monthly reports with reference to output, etc., to be made to the Minister, instead of yearly reports as formerly. The Act was also amended to give the Lieutenant Governor in Council power to grant leases for mining coal under road allowances, to make arrangements for the installation and operation of mine rescue stations, and to make regulations regarding wash-houses and emergency hospitals.

The list of permitted explosives was amended on November 5, 1918, so that this list contains now only the explosives known as Monobel No. 1, Polar Permitte, Viking No. 1, and Dynobel No. 2.

The most serious accident which occurred during the year was at the mine operated by the Oliphant-Munson Collieries, Ltd., near Coalspur, in which a building containing a small amount of powder was destroyed by fire, with the result that the powder exploded, killing the manager and blacksmith, and injuring four men seriously and eleven slightly. A fire also occurred during December, 1918, at Cardiff, by which the office of the Cardiff Collieries, Ltd., was completely destroyed. No satisfactory explanation could be obtained as to the causes of these fires.

During the year underground fires occurred at the mines operated by the Cardiff Collieries, Ltd., the Lakeside Coals, Ltd., the Humberstone Coal Company, Ltd., and the Franco-Canadian Collieries, Ltd. The fire at the mine operated by the Cardiff Collieries, Limited, has been in existence for several years, and it was thought that it had been successfully cut off from the workings, but during the month of August it found its way through several barrier pillars, the result being that the management was forced to abandon that portion of the mine. The fire which occurred at the mine operated by the Lakeside Coals, Limited, took place during the month of May in an abandoned portion of the mine. These workings were afterwards sealed off by stoppings and water pumped into this area by an electrically driven pump, but the fire has not yet been extinguished. It would appear that the fire which broke out in the mine operated by the Humberstone Coal Co., Ltd., near Clover Bar, had been caused by coal burning on the outcrop of the seam on the banks of the North Saskatchewan river several years previously. The area in which this

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fire occurred was sealed off by clay stoppings which were later reinforced by brick and cement. During the month of April an explosion occurred in the mine operated by the Franco-Canadian Collieries, Ltd., by which two men were slightly burned about the face and hands. This explosion, as far as could be ascertained, was caused by gas coming in contact with a fire which had been burning for several years in the upper portion of the mine, and which had been sealed off. The pillars surroundining the area where the fire was burning, caved, with the result that the gas became ignited. This mine is now abandoned.

An explosion of gas took place during the year in the mine operated by the Canmore Coal Co., Ltd., by which five men were more or less injured. This explosion was the result of insufficient inspection of the place where the shot was about to be fired. The effects of the explosion was felt for approximately 200 feet from the point of ignition, but the dust present did not show any signs of coking. Another explosion of gas occurred in the No. 3 mine operated by the Department of Natural Resources of the Canadian Pacific Railway Company at Lethbridge, by which a small quantity of gas, which accumulated in a cavity in the roof, was ignited.

During the year twenty-two persons lost their lives from accidents as compared with twenty-four during the year 1917. Of these fatal accidents, three occurred above ground and nineteen below ground. Sixteen persons were seriously injured above ground and forty-four below ground, and twenty-one persons were slightly injured above ground and fifty-six below ground.

In addition to the inspections which have been made, from time to time, of the different mines by the District Inspectors, all fatal and serious accidents have been investigated and all inquests attended.

Samples of mine air have been taken throughout the year by the District Inspectors, in addition to tests made by them, with the Burrell Gas Detector. These samples have been forwarded to the Department of Mines, Ottawa, and to the University of Alberta for analysis.

2,881 safety lamps of the Wolfe type, 35 of the Koehler type, 13 of the Marsaut type, 1,960 electric portable lamps of the Edison type, 600 of the Wico type and 50 of the Ceag type are in use. It will be noted that a considerable increase has taken place in the number of electric safety lamps in use, compared with previous years.

Training in connection with Mine Rescue work has been carried on satisfactorily throughout the year, there being three mine rescue cars and six stations at present in operation. Several appointments were made to fill vacancies caused by the resignations of Superintendents, and in every case a returned soldier received the appointment. When these appointments are made, due consideration is given to a man's efficiency and experience in mining, and in all cases these positions are being satisfactorily filled. On July 1, 1918, a competition in Mine Rescue and First Aid Work was held under the auspices of the Rocky Mountain Branch of the Canadian Mining Institute, at Lethbridge. Fuller particulars of this competition are given in the report under the heading of Mine Rescue Work.

There were 317 coal mines, two copper ore and two shale mines in operation during the year, seventy of which were opened, nine reopened and seventy-one abandoned. The mines in the Peace River District which were opened in 1916 have been abandoned, and no coal was produced in that district during the past year.

The total output of coal for the year 1918 was 6,148,620 tons, exceeding that for the year 1917 by 1,285,206 tons. The largest monthly production was during the month of January, when 646,368 tons were produced. Alberta is now in the position, for the first time, of being the largest coal-producing Province in Canada, 40.54 per cent. of the whole output of the Dominion being produced in Alberta.

Nine persons were prosecuted for contravention of The Mines Act during the year, convictions being obtained in each case.

Several changes in the staff of inspectors took place during the year. Mr. James Crowder, formerly manager of the Drumheller Land Co., Ltd., at Drumheller, was appointed District Inspector of Mines, succeeding Mr. William Stevenson, who took the position of General Manager of the Hillcrest Collieries, Ltd., at Hillcrest. Mr. Robert J. Lee, formerly manager of the Rock Springs Coal & Brick Co., Ltd., at Elcan, was appointed District Inspector of Mines for the Edmonton District, this being an additional appointment.

Mr. John W. Hooks was appointed superintendent of Mine Rescue Car No. 3, and Mr. Edward Royle, superintendent of Mine Rescue Car No. 1.

The number of persons employed in mines during December, 1918, was 10,209, being an increase of 397 over the number employed during December, 1917.

The question of widening the market for Alberta coal has received a great deal of attention during the past year, the result being that the amount of coal produced during 1918 exceeded the amount produced during 1917 by 26.42 per cent. On April 29, 1918, I was appointed Fuel Administrator by the Provincial Government to assist Mr. C. A. Magrath, Fuel Controller for the Dominion of Canada. A considerable amount of advertising was done through newspapers and other publications, and in addition a film, 1400 feet in length, showing the different mining operations, was produced, and is at present being shown in different theatres in the Province of Manitoba. Unfortunately the cost of production and freight rates have increased during the last two years to such an extent that it is difficult for Alberta coal to compete satisfactorily against American coal in the Manitoba and Saskatchewan markets. The average cost of production for labor alone, during the twelve months ending May 31, 1918, was \$2.07 per ton for domestic run of mine coal and \$2.01 per ton for steam run of mine coal as compared with \$2.36 per ton for domestic coal and \$2.18 per ton for steam coal for the six months ending December 31, 1918. In addition to this the cost of material has also increased to a great extent.

Although the amount of coal produced during 1918 was considerably in excess of that produced during 1917, this amount only represents approximately 50 per cent of the possible production in the Province with the present development, and if anything is to be done to obtain the Manitoba market by having a decreased cost of produc-

tion, the first thing to consider is the question of regulating the production in such a way that the coal mines in operation should produce at least 80 per cent of what they are capable of doing. It is also important that only the best grades of coal which we can produce in the Province are shipped into the markets where Alberta coal has to compete with imported coal, and this can only be done by instituting a system of zoning such as has been done in the United States during the last two years. The procedure would, of course, be harmful to the mines producing low grades of fuel, inasmuch as their market would be restricted, but it would undoubtedly be to the benefit of the Province as a whole.

The payroll for labor, at mines alone, during the year 1918, was approximately \$14,000,000, so that it will readily be seen the important part which the mining industry will take in the Province if it is conducted along proper lines.

From figures supplied by the Federal Government, there is a market available for Alberta coal of approximately nine million tons per year, and at least fifty per cent of this market can only be obtained if all coal is properly prepared, and only that of the best quality is sold in the territory into which American coal is shipped.

The following tables show the quantities in tons of coal entered for consumption during the years 1916, 1917 and 1918 through ports in the Provinces of Manitoba, Saskatchewan and Alberta, and including the ports of Fort Frances, Fort William and Port Arthur.

BITUMINOUS.

	1916	1917	1918
January	247,584	289,379	
February	237,246	116,267	
March	135,393	154.640	`
April	62,926	79,851	
May	110,671	143,116	
June	239,703	161,843	
July	282,696	300,690	
August	254,586	368,285	
September	236.111	233,043	
October	210,622		
November	194.017		1
December	165,379		
Total	2,376,934	1,847,094	2,240,447

ANTHRACITE.

	1916	1917	1918
_ `		0.070	
January	4,075	3,278	_
February	16,665	5,333	
March	2,995	2,842	
April	443	78	
May	20,306	51,863	·
June	83,157	89,056	
July	123,281	89,665	
August	81,176	65,231	
September	78,636	59,041	Í
October	50,816		
November	40,410		
December	31,682		,
Total	533,642	366,387	318,594

The figures showing importation for the year 1917 are for nine months ending September 30, no figures being available for the last three months of the year.

No figures are available showing the amount of coal imported by months during the year 1918.

ANNUAL CONSUMPTION OF COAL IN CANADA.

Calendar Year	Canadian		Importe	d	Total	Per
	Short Tons	%	Short Tons	%	Total	Capita
1905	7.032,661	48.9	7.343.880	 51.1	14,376,541	2.362
1906	7,927,560	51.7	7.398.906	48.3	15,326,466	2.425
19 07	8,617,352	45.0	10,549,503	55.0	19,166,855	2.947
1908	9,156,478	47.3	10,195,424	52.7	19,351,902	2.820
1909	8,913,376	47.9	9,711,826	52.1	18,625,202	2.682
1910	10.532,103	50.2	10.438,123	49.8	20,970,226	2.960
1911	9,822,749	40.5	14,424,949	59.5	24,247,698	3.384
1912	12.385.696	46.0	14.549.104	54.0	26,934,800	3.596
1913	13,450,158	42.6	18,132,387	57.4	31,582,545	4.071
1914	12,214,403	45.5	14,637,920	54.5	26,852,323	3.325
1915	11,500,480	48.1	12,406,212	51.9	23,906,692	
1916	12.348.036	41.3	17,517,820	58.7	29,865,856	
1917	14.046.759	40.2	20,857,460	59.8	34,904,219	
1918	15,180,000	40.8	22,057,065	59.2	37,237,065	

American coal shipped into Canada, by Provinces East and West, for the Year ending December 31, 1918:

East	Anthracite	Bituminous	Total	
Ontario	2,842,970	10,994,289	13,837,259	
Quebec	1,500,669	4,033,618	5,534,287	
Nova Scotia	43,792	1,097	44,889	
New Brunswick	71,450	5,035	76,485	
Prince Edward Island	5,104		5,104	
Total (tons)	4,463,985	15,034,039	19,498,024	

West	Anthracite	Bituminous	Total	
Fort William	249,910	1.562,314	1,812,224	
Port Arthur	65,594	643,728	709,322	
Manitoba	2,827	28,234	31,061	
Saskatchewan	37	419	456	
Alberta		913	913	
British Columbia	226	4,784	5,010	
Yukon		55	55	
Total (tons)	318,594	2,240,447	2,559,041	

Total amount imported into Canada, for year ending December 31, 1918:

-	Western Canada	·Eastern Canada	Total
Anthracite and Bituminous (tons)	2,559,041	19,498,024	22,057,065

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SUMMARY OF STATISTICS.

Number of short tons of coal produced	
Number of short tons of briquettes produced	100,470
Number of short tons of coke produced	32.858
Number of short tons of shale produced for making bricks	9,898
Number of short tons of bricks sold	7.687
Number of coal mines in operation	317
Number of copper ore mines in operation	2
Number of shale mines in operation	2
Number of mines opened	70
Number of mines re-opened	9
Number of mines abandoned	71
Average number of persons employed above ground	2,633
Average number of persons employed below ground	6,141
Number of separate accidents causing loss of life	21
Number of deaths caused by accidents above ground	3
Number of deaths caused by accidents below ground	19
Number of serious accidents above ground	16
Number of serious accidents below ground	
Number of slight accidents above ground	21
Number of slight accidents below ground	56
Number of persons prosecuted under The Mines Act	9
Number of Provisional Overmen's Certificates issued during 1918	
Number of Third Class Certificates issued during 1918	45
Number of Second Class Certificates issued during 1918	28
Number of First Class Certificates issued during 1918	9
Number of Mine Surveyors' Certificates issued during 1918	7
Number of Mine Rescue Certificates issued during 1918	108
Total number of Third Class Certificates issued to date	532
Total number of Second Class Certificates issued to date	253
Total number of First Class Certificates issued to date	185
Total number of Mine Surveyors' Certificates issued to date	140
Total number of Mine Rescue Certificates issued to date	448

In the following tables the short ton of 2,000 lbs. is used in all cases.

	· Output in tons	
	for N.W.T.	Output
Year	Alberta	in tons
•	and Saskatchewan	Alberta
1901	346,649	
1902	510,674	
1903		
1904		
1905		811,228
1906		1,385,000
1907		1,834,745
1908		1,845,000
1909		2,174,329
1910 		3,036,757
1911	-	1,694,564
1912		3,446,349
1913		4,306,346
1914		3,821,739
1915		3,434,891
1916		4,648,604
		4 069 414
		4,863,414
918		6,148,620

CLASSIFICATION OF OUTPUTS DURING THE YEARS 1901 TO 1918 INCLUSIVE.

Year	Domestic	Domestic and Bitumin- ous	Bituminous	Anthracite	Coal Used in Coke Production	Briquettes	Coke
*1901		331,907		14,742			
*1902		494,087		16,587			
*1903	- 	617,754		5,185			
*1904		759,568		23,363			
1905		972,686		43,653	71,292		46,640
1906	602,780		546,623	235,597	103,936		69,844
1907	639,335	-	939,295	256,115	112,887	49,585	73,782
1908	584,334		1,011,571	249,095	128,397	36,261	75,657
1909	763,673		1,197,399	213,257	148,104	89,785	87,812
1910	878,011		1,896,961	261,785	196,249	108,996	121,578
1911	964,700		649,745	80,119	61,591	48,200	35,984
1912	1,341,389		1,926,371	178,589	170,818	90,000	105,684
1913	1,763,225		2,374,401	168,720	104,012	130,861	65,167
1914	1,697,401		1,953,367	170,971	44,249	109,082	29,058
1915	1,682,922		1,626,237	125,732	38,878	83,180	23,826
1916	2,172,801		2,335,259	140,544	67,105	107,959	41,950
1917	2,537,829		2,206,868	118,717	51,905	93,818	31,630
1918	3,035,061		2,982,334	131,225	53,462	100,470	32,858

^{*}Includes outputs from Alberta and Saskatchewan.

During the year 1909 a strike affecting all the larger mines in the Province lasted for a period of three months.

During the year 1911 a strike affecting all the larger mines in the Province lasted for a period of eight months.

During the year 1917 a strike affecting all the larger mines in the Province lasted for a period of three months.

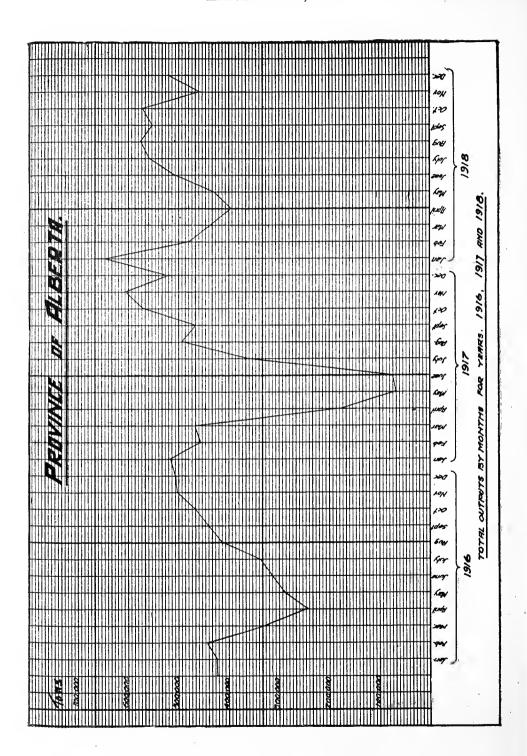
The following table shows the outputs of the different districts for the years $1917\ \mathrm{and}\ 1918$:

		1917			1918	
DISTRICTS	Domestic	Bitu- minous	Anthra- cite	Domestic	Bitu- minous	Anthra- cite
Crow's Nest Pass		1,193,313		.	1,601,486	
Pincher Creek				3,955		
Lethbridge	619,850)	l			
Magrath	1,011	.}	1		1	
Milk River	9,140		Í			
Taber						
Bow Island	6,846	1	[7,283	:\ _	
Medicine Hat	14,846	1		19,028		
Aldersyde			1			
High River	1,096	l		570		
Canmore			1	11	274,709	
Banff	í	Í	118.717	[[(131,223
Drumheller	660,974		(881,081	(
Big Valley		1		34.718	[
Brazeau		266,897		11	371,562	
Brooks	8,283	l		9,783		
Hanna	26,064	1		29,533		
Lacombe	18,223		 	15,201		
Trochu	14.134	[_	18,248		
Three Hills	24,874	[30,150	i[
Carbon	4,615			5,431		
Battle River	10,544	f			([
Camrose	61,293				((
Tofield	71,510			66,054		
Clover Bar	263,857		~~~~~	264,868		
Edmonton	120,519			106.756		
Namao	19,406	[]		21,660	[
Cardiff	257,459	([
Wabamun	19,007	 		19,250		
Pembina	84,349			109,429	[~ <u>-</u>
Jasper Park		250,079		J	283,342	
Yellowhead Pass		146,949		1		
Mountain Park		153,397			255.263	
Peace River						
Total	2,537,829	2,206,868	118,717	3,035,061	2,982,334	131,225

The following table indicates how the total outputs of COAL, BRIQUETTES and COKE were disposed of:

Total	for Year (includ- ing slack)	129,577 3,035,061 15,431 2,982,334 16,147 131,225	161,155 6,148,620	100,470 32,858
Slack	put on Waste Heap	129,577 15,431 16,147	161,155	In Stock 787 197
T ifted	from	3,802 8,778 327	12,907	
	Under Colliery Boilers	194,148 109,668 28,837	332,653	26
USED	Making Coke	53,462	53,462	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Making Briqu- ettes	55,402	55,402	
	Total Sales	3,154 2,715,138 130,082 2,812,551 40 31,166	133,276 5,558,855	99,657
Z	United	3,154 130,082 40	133,276	102
SOLD FOR CONSUMPTION IN	Ontario	185	629	
CONSUM	Manitoba	387,728 120,132 3,308	511,168	7,710
LD FOR	Saskat- chewan	26,849 1,091,544 69,163 273,195 5,177 7,700	101,189 1,372,439	16,060
S	British Columbia		101,189	4,368
	Alberta	1,205,419 2,219,794 14,941	3,440,154	71,519
		Domestic 1,205,41. Bituminous 2,219,79 Anthracite 14,94	Total 3,440,154	Briquettes

The bituminous coal shown in these tables as being sold for consumption in Alberta includes coal sold to railway companies for the use of locomotives, a considerable percentage of which was probably used in other Provinces.



The following table indicates how the total output of Domestic coal from the Province was disposed of:

NAME OF DISTRICT		SOLD	FOR CON	SOLD FOR CONSUMPTION	NI IN		Topul	Used Under	100	()
	Alberta	British Columbia	Saskat- chewan	Manitoba	Ontarlo	United States	Sales	Colliery Boilers	Stack put on Waste Heap	(including slack)
Pincher Creek	3,683	 	31	180		100	3,949		9	3.955
Lethbridge	230,569	14,770	397,346	90,107	115	191	733,098	77,276	46.718	857,092
Magrath	1,582	į	1	1	1	1 1 1	1.582		45	1,627
Milk River			1		1	63	6,461	7	380	6,848
Taber	23,387	3,193	85,673	31,170	91	810	144,324	20,337	18,824	183,485
Bow Island	6,806						6,806		477	7,283
Medicine Hat	5,371		9,667	1,677		1,524	18,239	21	, 892	19,028
Aldersyde	7,533						7,533	<u> </u>	536	8,069
nign kiver	090	į	f	1:	1 1 1 1 1 1 1 1 1 1	1:	999		10	. 570
Drumheller	158,344	3,825	448,071	204,161	172	511	815,084	41,773	24,224	881,081
Big valley	32,984		1 1 1 1	1,145		4	34,129	280	6	34,718
Brooks	9,727						9,727		92	9,783
Hanna	28,186		1 1 1 1 1	1 1 1 1 1 1			28,186	288	759	29,533
Lacombe	13,399	1 1 1 1 1	789	124		1	14,312	113	922	15.201
Trochu	14,888	1	200	99		1	15,454	624	2,170	18,248
Three Hills	16,339	102	5,669	2,615		1	24,693	1,848	3,609	30,150
Carbon	5,409				1 1		5,409		22	5.431
Battle River	11,555						11,555	1	648	12.203
Camrose	34,311	27	18,165	268]		52,771	1.245	2.581	56.597
Tofield	50,338		10,829	3,628			64.795	1.021	238	66.054
Clover Bar	186,497	210	36,805	15,336		1 1 1 1 1 1 1 1	238,848	17,663	8,357	264.868
Edmonton	82,454		12,600	1,620	32	-	96.706	10,010	40	106,756
Namao	12,909			1,305			18,929	444	2.287	21.660
Cardiff	209,802			9,155			248.180	13.266	4.696	266,142
Wabamun	9.244	32	6.031	3.424			18.731	519	,	19.250
Pembina	43.144			21,747			95.077	6.813	7.539	109 429
Peace River			i							
Total	[1.205.419]		26.849 1.091.544	387.728	444	3 154	9 715 138	194 148	195 775	3 035 061
						10160	2,10,10	0116101	10,11	1,000,001

The following table indicates how the total output of BITUIMINOUS coal from the Province was disposed of:

Lifted Slack To	Put to		8,861 7,637 3,221 1. 25 1,081 170	8,861 7,637 3,221 25	8,861 7,637 3,221 1. 25 1.081 1.70 1,081 3,094 3,094 8,886 8,718 6,585 2	8,861 7,637 3,221 1. 25	8,861 7,637 3,221 1,601,486 25 274,709 274,709 274,709 271,562 271,5	8,861 7,637 3,221 1,601,486 28 25 274,709 371,562 391 3,094 283,342 283,342 30 2.65,203 283,342 391 283,342 391 283,342 391 292,334 391
Total	Sales Making Colliery Coke Boilers	1,482,928 53,462 60,651 259,278 62,832 55,991 5,5991		12,551 53,462 109,668	BRIQUETTES and C			Total Making US Sales Briquettes Boi
7.	States S United	130,082 1,48		5 130,082 2,812,551	THRACITE,			United States
SUMPLION IN	Manitoba Ontario	62,057 662 2,157	18,027 185	120,132 185	outputs of AN	1	SOLD FOR CONSUMPTION IN	(SUMPTION IN Manitoba Ontario
SOLD FOR CONSUMPTION IN	British Saskat- Columbia chewan	56,761 114,670 6,541 9,490 4,447	4,248 48,984 1,613 95,604	69,163 273,195	s how the total		SOLD FOR CO?	SOLD FOR CON British Saskat- Columbia chewan
	Alberta	s -1,119,358 242,583 359,878 -		2,219,794	The following table indicate			Alberta
		Crow's Nest Pass . Canmore Brazeau	Jasper Fark Yellowhead Pass Mountain Park	Total	The follow			

The Crow's Nest Pass was the only district in which Coke was produced during the year, and Banff in which Briquettes were produced,

The following tables give particulars of work done at the Shale Mines in the Province:

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		THE CHA	,
		1	Y
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		217	1
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Total.	2,99274 4,425% 106 54 109	7,687		Total.	868'6		Total.	346
Dec.	66	130		Dec.	1,420		Dec.	26
Nov.	174 90	264		Nov.	131		Nov.	28
Oct.	289 267	632		Oct.	433		Oct.	30
Sept.	129 1974 1973 33	35914	0 LBS. CKS.	Sept.	610	KED.	Sept.	29
Aug.	33314 448 33	8141/4	OF 2,00 NG BRI	Aug.	918	S WOR	Aug.	31
July	2991/2	7331/2	TONS MAKI	July		F DAY	July	67
June	441 568 40	1,049	OUTPUT OF SHALE IN TONS OF 2,000 LBS. SHALE USED IN MAKING BRICKS.	June	936	AVERAGE NUMBER OF DAYS WORKED	June	29
May	3443	887	OF SH	May	642	GE NU	May	30
April	300 513½ 33 54	2,006	UTPUT SI	April	340	AVERA	April	29
Mar.	3091/2 8471/2	1,157		Mar.	1,338		Mar.	30
Feb.	2811/2	397		Feb.	824		Feb.	32
Jan.	1921/2	3631/2	4	Jan.	2,306		Jan.	20
Province	Alberta Saskatchewan Saskatchewan Manitoba U. S. A	Total Sales		District	Medicine Hat -		District	Medicine Hat -

MINES.
SHALE D
Z
EMPLOYED
MEN
NUMBER OF
DZ

	C. Total. Average	1 8 1.2		Total. Average	20 20.8	Shots fired by: Elec. det. 335; by fuse 2,023.	Miss-Fires	0
	Dec.			Dec.	- A	det.		
	Nov.	7		Nov.	22	by: Elec	Fuse	
	Oct.	7 7		Oct.	21	its fired	ired by	105
1	Sept.	F-11	KS.	Sept.	21	Sho	Shots Fired by Fuse	
2	Aug.	- 1	BRIC	Aug.	23	lbs.	d.	te
	Jµly		MEN EMPLOYED MAKING BRICKS.	July	83	Explosives used: 3,2781, lbs. COPPER ORE MINES.	Explosives used	95 lbs. Dynamite
	June	1.	OYED	June	21	sives used PER OR	Explo	95 lbs.
	May	11	EMPL	May	22	Explos		
	April	1.7	MEN	April	21		Days worked	20
	Mar.	P H		Mar.	22	ineal feet.	Day	
	Feb.			Feb.	24		yed	
	Jan.	16		Jan.	31	r used:	n Emplo	
1		Below Ground Above Ground		District	Medicine Hat -	Mine Timber used: 7,925	Number of Men Employed	10

The following table shows the total output of DOMESTIC Coal in Districts during each month:

District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Creek	374	361	215	149	142	201	319	206	180	420	747	641	3,955
Lethbridge	86,286	80,287	73,464	63,290	60,179	62,907	70.307	77,510	69,864	78,530	57,317	77,151	857,092
Magrath	29	_	41	<u></u>			130	168	147	215	514	287	1,627
Milk River	571		392	235	363	447	482	510	652	945	1,045	670	6,848
Taber	24,165	64	5,625	2,829	5,915	13,146	17,544	19.818	19,728	21,140	13,029	17,611	183,485
Bow Island	603		442	3901	472	350	402	399	613	1,326	1,140	535	7,283
Medicine Hat -	2,623	1,040	421	179	220	556	1,408	1,944	2,579	3,841	1,960	2,257	19,028
Aldersyde	727	637	569	297	379	216	481	396	703	1,402	1,443	819	8,069
High River	53	65	20	24	48	25	20	2	29	102	66	48	570
Drumheller	96,291	_	29,738	7,721	38,950	93,647	123,054	127,150	105,691	82,201	77,335	85,938	881,081
Big Valley	4,535	_	2,442	768	1,977	2,381	2,998	2,170	2,455	3,566	4,088	5,776	34,718
Brooks	803		625	220	457	433	983	437	1,188	1,921	1,076	807	9,783
Hanna	2,867	2,960	2,013	558	1,323	1,462	1,669	867	2,103	5,159	5,246	3,306	29,533
Lacombe	3,607	3,132	1,006	173	202	355	309	541	192	1,689	1,865	1,252	15,201
Trochu	2,877	2,555	1,188	113	286	294	1,052	1,163	1,247	1,873	2,944	2,656	18,248
Three Hills	4,036	3,819	1,374	1,113	1,546	2,580	3,276	2,311	2,166	2,771	3,411	1,747	30,150
Carbon	547	646	346	137	305	351	576	372	342	785	661	363	5,431
Battle River	2,232	2,334	853	17	64	126	128	45	115	1,235	2,525	2,529	12,203
Camrose	10,357	8,501	3,851	1,776	1,721	2,166	2,772	2,194	2,958	5.510	6,672	8,119	56,597
Tofield	. 13,883	7,583	4,136	2,282	2,451	2,785	3,875	5.655	5,009	6,675	6,615	5,105	66,054
Clover Bar	45,720	31,867	17,287	7,741	9,947	20,311	20,455	17,156	19,255	23,446	26,356	25,327	264,868
Edmonton	17,851	13,692	7,577	5,187	4,838	7,165	8,215	4,160	6.867	9,916	10,973	10,315	106,756
Namao	3,328	3,226	1,340	968	086	1,125	1,384	1,455	1,455	2,186	1,749	2,536	21,660
Cardiff	45,871	33,614	14,782	10,460	14,952	19,404	14,129	15,276	23,474	27,012	17,829	29,339	266,142
Wabamun	2,550	1,942	1.502	534	641	1,339	1,198	1,404	1,700	1,706	2,638	2,096	19,250
Pembina	15,128	9,542	2,825	2,361	7,364	9,137	6,831	11,257	11,050	14,493	11,109	83,321	109,429
Peace River	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1			1 1 1 1 1				1	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
												==	
Total	387.952	249.693	174.164	109.458	156.025	242.911	283.997	294.571	282.337	300.065	9860386	993 569	3 035 061
)			10010010

The following table shows the total output of BITUMINOUS Coal in Districts during each month:

183,731 118,437 138,833 148,583 141,811 148,879 147,945 141,136 131,675 121,680 107,032 121,744 1,601,23,536 23,580 23,580 23,425 23,444 35,566 23,425 23,477 23,477 23,477 23,475 23,475 24,677 23,386 23,382 23,382 23,382 23,382 23,382 23,382 23,382 23,382 15,410 23,414 35,566 15,287 15,289 15,410 25,477 23,508 25,690 24,670 27,780 29,46 18,197 25,510 25,691 22,697 22,597 25,591 22,697 22,697 22,597 25,597 25,697 22,697 22,697 22,597 22	District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	0ct.	Nov.	Dec.	Total.
Sept. Sept	Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass		23,664 24,903 22,197 11,903	138,833 23,520 23,388 29,058 13,806 18,886	148,583 26,225 32,444 30,605 15,410 17,261	141,811 22,710 35,596 27,586 15,327 16,668	148,879 24,479 32,425 18,898 16,133 18,841	147,945 25,477 35,377 19,565 16,919 23,508	141.136 22,953 41,778 22,276 19.109 27,269	131,675 23,981 37,672 25,900 20,461 24,670	121,680 24,757 38,764 26,693 22,037 27,780	107,032 21,468 17,538 15,671 9,946 20,974	121,744 11,506 23,322 21,001 18,197 22,521	1,601,486 274,709 371,562 283,342 195,972 255,263
The following table shows the total output of ANTHRACITE Coal during each month: Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. Total			218,866	247,491	270,528	259,698	259,655	268,791	274,522	264,359	261,711	192,629	218,291	2,982,334
Sept. Oct. Nov. Dec. Total Total May June July Aug. Sept. Oct. Nov. Dec. Total Total Sept. Total Sept. Oct. Nov. Dec. Total Sept. Sept. Oct. Sept. Sep	The follow	ring tabl	e shows	the tota	l output	of AN	THRACI	TE Coa	l during	each m	onth:			
Total 12,623 13,165 13,621 14,219 12,141 9,907 11,368 10,308 10,021 9,601 6,139 8,112 131.	District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
The following table shows the total output of COAL, BRIQUETTES and COKE during each month: Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. Total	Sanff	12,623	13,165	13,621	14,219	12,141	9,907	11,368	10,308	10,021	9,601	6,139	8,112	131,225
Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. Total	The follow	ring tabl	e shows	the tota	l output	of COA	L, BRI	QUETTE	3S and C	OKE dı	uring ea	ch mont	р: Р	
ettes 2,670 2,272 2,934 3,503 3,320 3,364 3,162 3,162 3,569 3,340 2,774 6,450 1,267 2,934 3,503 3,340 3,369 6,602 3,162 3,560 3,340 2,460 1,250 1,123 32		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
	Joal Briquettes	646,368 8,801 2,670	481,724 7,827 2,272	435,216 9,615 2,934	394,205 10,679 3,503	427,864 9,900 3,220	512,473 6.602 3,364	564,156 9,108 3,162	579,401 9,427 3,560	556.717 7,648 3,340	571,377 7,741 2,460	459,154 6,491 1,250	619.965 6,631 1,123	6,148,620 100,470 32,858

The following table shows the total sales of DOMESTIC Coal in Districts during each month:

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Creek _	374	361	215	149	142	201	319	206	180	420	747	635	3,949
Lethbridge	77.039	70.748	65.217	53.992	49.451	54.020	25 200	64 037	58 110	66.152	49.012	66.120	733,098
Magrath	48	33	27	1	-0162	212	130	168	147	215	514	287	1.582
Milk River	553	523	379	230	332	365	405	392	623	944	1.045	670	6.461
Taber	19.127	18,238	4.780	1.707	4.171	10.130	13.947	15.743	15.114	16.759	10.510	14.098	144.324
	573	558	390	375	448	330	356	362	566	1.264	1.074	510	6.806
Medicine Hat _	2.505	993	401	171	210	522	1.307	1.866	2.492	3,703	1.880	2.189	18,239
Aldersyde	989	909	551	276	353	173	433	370	651	1.340	1.345	749	7.533
High River	53	65	20	24	38	25	20	7	239	102	66	48	260
Drumheller	88,706	11,135	27,003	6.105	35.707	89,541	115.164	119.084	97.423	74.670	70.621	79.925	815.084
Big Valley	4,485	3.512	2,392	738	1.927	2,331	2.948	2,120	2,405	3.507	4.038	3.726	34.129
Brooks	190	824	619	214	451	433	983	437	1.182	1.911	1.075	808	9,727
Hanna	2,721	2,818	1,896	477	1.251	1.393	1.565	000	2.033	4.975	5.078	3.141	28.186
Lacombe	3,452	2,975	985	154	455	259	302	231	757	1.679	1.865	1.198	14,312
Trochu	2,586	2,271	1,053	105	266	264	872	896	942	1,585	2,301	2,323	15,454
Three Hills	3,363	3,186	1,132	390	1,248	2,190	2.579	2.309	1.806	2,235	2,662	1,592	24,693
Carbon	240	637	340	137	305	351	576	372	342	785	661	363	5,409
Battle River	2,144	2,257	821	17	54	65	103	35	107	1,143	2.386	2,423	11,555
Camrose	9,758	7,990	3,576	1,571	1,569	2,005	2.581	2.089	2.863	5,172	6,144	7.453	52,771
Tofield	13,772	7,485	4,065	2,243	2,415	2,706	3,719	5,500	4,851	6,499	6,535	5,005	64,795
Clover Bar	41,626	28,830	15,145	6,393	8,467	18,511	18,555	15,423	17,527	21,337	24.172	22,862	238,848
Edmontón	17,058	12,847	6,779	4,497	4,133	6,492	7.512	3,424	6.045	8.830	9.818	9.270	96,706
Namao	2,879	2,786	1,159	764	841	977	1,184	1,298	1,268	1.943	1,531	2,299	18,929
Cardiff	43,037	30,722	12,435	8,897	14,178	18,437	12,992	14.318	22,261	25.781	16.878	28.244	248,180
bamun	2,514	1,878	1,426	494	611	1,303	1,159	1.368	1.664	1.670	2.593	2.051	18.731
Pembina	12,683	7.925	2.232	1.518	6.456	8.083	6.255	10.020	10.047	13,363	9,679	6.816	95 077
Peace River		1	-		, , , ,		, , , , , , , , , , , , , , , , , , , ,	20101		20010-	2	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	
Total	353.072	222,209	155.068	91.645	135.479	221.107	255 157	969 913	951 435	967 984	934 964	964 805	9 71 5 138
		- >>1(111	- 100001	41,040	7 1 1 1 C	- >1:177	4.00.TO	40.40 A	7.1.1	100.100	107.107	7.00	

The following table shows the total sales of BITUMINOUS Coal in Districts during each month:

District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Crow's Nest Pass Camnore Brazeau Jasper Park Yellowhead Pass	122,783 22,865 27,795 23,389 15,279 18,307	22,504 24,359 21,779 10,869 17,013	125,403 22,353 22,879 28,660 12,735 18,069	136,883 25,024 31,902 30,215 14,248 16,436	131,353 21,527 35,128 27,155 14,268 15,863	138,297 23,243 32,297 18,444 15,198 18,033	139,894 24,141 35,636 19,319 15,856 22,605	. 128,681 21,591 41,284 22,222 17,647 26,405	22,543 37,047 25,345 18,816 23,765	114,219 23,336 38,257 26,097 20,558 26,900	97,974 19,926 17,053 15,047 8,648 20,131	114,837 10,223 22,840 20,411 16,002 21,606	1,482,928 259,276 366,482 278,083 180,649
Total	230,418	204,059	230,099	254,708	245,294	245,512	257,451	257,830	252,585	249,367	178,784	205,919	2,812,551
The following table sh	ing tabl	e shows	ows the total sales of ANTHRACITE Coal during each month:	sales o	f ANTH	RACITI	E Coal c	during e	ach · mon	ıth:			
District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Banff	3,162	3,245	3,093	2,679	2,869	2,583	3,087	2,721	2,435	2,269	1,254	1,769	31,166
The following table sh	ring tabl	e shows	the tota	l sales o	f COAL	, BRIQI	the total sales of COAL, BRIQUETTES		and COKE during each	ing each	n month		
,	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Coal	586,652 8,801 2,670	429,513 7,827 2,312	388,260 9,615 2,934	349,032 10,670 3,375	383,642 9,888 3,410	469,202 6,596 3,181	515,695 8,900 3,330	523,464 9,326 3,502	506,455 7,628 3,094	519,620 7,273 2,846	414,302 6,463 1,213	472,493 6,670 794	5,558,855 99,657 32,661
And the second s		-		-	-	-	-	-				_	

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District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Creek -	374	271	155	149	112	170	264	206	180	420	747	635	3.683
Lethbridge	25,874	18,808	21,270	19,113	13,709	17,206	18,880	18,953	17,929	19,508	18,574	20,745	230,569
Magrath	84.7	98	22	7 -	100	1 1 0	130	168	147	215	514	287	1,582
Milk River	553	523	379	230	332	365	405	392	618	923	1,045	633	6,398
Taber	3,041	2,762	2,155	096	1,021	1,370	1,437	1,616	1,405	2,167	2,286	3,167	23,387
Bow Island	573	258	390	375	448	330	356	362	999	1,264	1,074	210	908'9
medicine Hat	345	188	141	59	27	08	282	477	931	1,337	914	290	5,371
Aldersyde	989	909	551	276	353	173	433	370	651	1,340	1,345	749	7,533
High River	53	65	_ 02 02	24	38	25	20	2	29	102	66	48	560
Drumheller	24,965	3,921	8,077	2,273	9,603	13,790	16,712	17,873	13,768	13,528	16,131	17,703	158,344
Big Valley	4,195	2,823	2,392	738	1,927	2,228	2,885	2,120	2,405	3,507	4,038	3,726	32,984
Brooks	790	824	619	214	451	433	983	437	1,182	1,911	1,075	808	9,727
Hanna	2,721	2,818	1,896	477	1,251	1,393	1,565	838	. 2,033	4,975	5,078	3,141	28,186
Lacombe	3,027	2,487	982	154	455	259	302	231	757	1,679	1,865	1,198	13,399
Trochu	2,586	2,271	1,053	102	266	264	492	803	878	1,522	2,224	2,147	14.888
Three Hills	2,331	2,256	1,132	390	832	1,165	870	1,108	1,338	1,586	1,985	1.345	16,339
Carbon	240	637	340	137	305	351	576	372	342	785	661	363	5,409
Battle River	2,144	2,257	821	17	54	65	103	35	107	1,143	2,386	2,423	11,555
Camrose	7,369	5,502	2,114	903	866	783	1,545	1,165	1,585	3,557	4,850	4,000	34,311
Totald	9,997	5,722	3,975	2,243	2,198	2,436	2,318	4,540	3,834	4,607	4.846	3,622	50.338
Clover Bar	32,285	20,733	13,185	5,762	6,478	11,764	11,232	11,086	14,125	18,355	20,719	20,773	186,492
Edmonton	13,735	10,331	6,218	4,435	3.948	5,016	5,764	2,628	5,211	7.673	8.983	8.512	82,454
Namao	1,528	1,765	899	899	909	543	592	825	722	1,567	1.330	1.964	12,909
Cardiff	33,392	23,477	11,695	8.632	12,857	15,747	10,393	11,263	18,239	22,214	15,930	25,963	208.802
Wabamun	522	618	1,298	324	395	847	582	762	208	899	1.328	961	9.244
Pembina Peace River	6,906	3,550	1,777	1,238	3,780	4,052	3,031	3,736	2,949	6,226	3,421	2,478	43,144
			-			***************************************			111111111111111111111111111111111111111				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total	180,520	115,812	83,594	49,903	62,344	80,856	82,429	82,373	92,639	123,010	123,448	128,491	1,205,419
							the lands of the land of the l				1		

The following table shows the amount of DOMESTIC Coal sold during each month for consumption in British Columbia: 631 32 4,091 26,849 14.770 3,193 210Total. 2,292 1,180 -89 4,866 551 Dec. 2,745 1,388 517 291 Nov. 2,325 482 1,078 4,389 401 34Oct. 328 32 798 3,470 1,223 505 551 2,1621,150264 489 96163 Aug. 1,246 837 35 62July 96 875 391 167 160 34 June 1,126 550 8 495 May 567 299 April 973 881 Mar. 1,657 1,385 133 35104 Feb. 2,773 1,781 338 227 397 30Jan. Lethbridge ----Magrath -----High River ---Pincher Creek Aldersyde ----Medicine Hat Battle River Peace River Taber _____ Bow Island . Lacombe ---Three Hills District Drumheller Carbon ---Camrose __ Clover Bar Edmonton _ Big Valley Wabamun Total Brooks Trochu Namao Cardiff Hanna Tofield

District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Creek _ Lethbridge	40,929	38,183	33,312	29,183	25,797	31 27,395	31,669	37,312	32,743	37,403	24,741	38,679	31
Magratu	11,663	6,547	1,524	209	2,703	5,957	9,334	11,106	11,426	10,654	5,979	8,173	85,673
Bow Island Medicine Hat - Aldersyde	086	340	180	112	183	382	710	1,224	1,318	2,022	112	1,479	9,667
High River Drumheller Rig Valley	46,356	5,435	16,341	3,566	15,832	38,286		74,430	60,350	42,171	36,466	40,775	448,071
Brooks) 1 1 1 1 1 1	•		
Lacombe	395	394						1	1				780
TrochuThree Hills	344	266			184	483	93 1,540	93	64 468	63	44	143	5,669 5,669
Battle River	1	1 1 1 1 1 1				1	1	1 1 1 1 1 1 1		1	1 1 1		1
Camrose	2,386	2,423	1,462	638	571	1,195	1,036	844	1,278	1,615	1,294	3,423	18,165
Toneia Dem	7,745		90	120		120	1,124	830	761	1,441	1,336	1,016	10,829.
Edmonton	3,110	4,014	1,1 (4	600		5,T07	5,727	3,631	2,739	2,228	2,231	1,466	36,805
Namao	801		165	96		43.4	1,510	200	100	300	50T	279	12,600
Cardiff	7,035	4,410	620	265	_	2,207	2.210	1.899	3.084	3.330	848	1581	4, (10 2x 509
Wabamun	1,894	849	96	1		209	369	482	465	403	203	875	6.031
Peace River	3,384	2,232	345	61		1,362	2,600	4,385	4,010	2,163	2,798	2,721	26,061
Total	199 099	. 360 09	EE 070	2 4 6	1000	1	100						-

District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Creek	8,298	90	9,754	5,129	30 9,395	9,028	7,814	6,622	6,215	6,882	4,275	4,357	180 90,107
	4,026	8,796	1,009	140	447	2,636	.3,089	2,757	1,731	3,245	1,457	1,837	31,170
Medicine Hat	740	305	40			30	. 40	40	122	188	132	40	1,677
High River Drumheller Big Valley Brooks	17,047	1,744	2,585	266	10,191	37,240	30,143	26,292	22,660	18,570	17,398	20,025	204,161
Hanna Lacombe Trochu	30	94									83	33	124
Three Hills	889	664			232	641	129	9.2		26	193		2,616
Battle River Camrose Tofield	63	65		30	155	150	277	80	256		353	30	<u> </u>
Clover Bar	2,341	3,483	786	566	1,166	1,640	1,596	124	690	170	1,152	136	·
Namao Cardiff Wabamun Pembina	2,580 2,580 98 2,166	469 2,790 411 2,039	120 32 32 110	170	257 30 2,149	449 247 2,573	327 208 562	1,060 1,060 93 1,736	459 2,290	203 368 3,896	32 1,062 2,943	33 700 215 1,066	1,305 9,155 3,424 21,747
Total	40.160	24 544	107	062.9	04 050	100	44.600	070	100	000	700 00	100 06	0611 1106

District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Creek _							 		L				
Lethbridge			1							34	34	47	115
Milk River	 	 	1	1 1 1 1 1 1 1 1 1 1	1						1 1,	1 1 1 1 1 1 1 1 1 1	
Taber Bow Island	1 1	 	 	 		1 I I I I I I I I I I I I I I I I I I I			47	 1 1 1 1 1	44		91
Medicine Hat -		 			1 1 1 1 1 1 1 1								
Aldersyde		1					1	1			1	1	
Drumheller						65	61				46		172
Big Valley		1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1	1	1 1 1 1 1 1 1 1 1 1	-		
Hanna		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1											
Lacombe	1 1 1	1 1 1	1			1 1 1 1		1		1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Trochu		 					1 1 1 1 1 1		1 1 1 1 1 1 1 1				
Carbon													
Battle River													
Camrose	1 1 1 1 1 1 1	 		 		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1						
Clover Bar													
Edmonton		32											32
Namao	1 1 1 1 1				1 1 1 1	1 1 1 1	 			1			
Wabamun							1 1 1 1 1 1 1 1 1 1 1						
Pembina	1 1 1 1		-1	1	34	1					1		34
reace Mivel			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1									
Total		32			34	65	61		47	34	. 124	47	444

District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Creek - Lethbridge	157	34					55						55 191
Magrath Milk River Taber									m	$\frac{21}{211}$	453	37	63 810
Bow Island Medicine Hat -	440	160	40			30	275	105	121	156	117	80	1,524
High River									94		175	242	511
Brooks						· · · · · · · · · · · · · · · · · · ·							
Lacombe						· ' · · · · · · · · · · · · · · · · · ·						 	
Three Hills													
Battle River			1 1										
Totield Clover Bar Edmonton Namao												 	
Cardiff Wabamun Peace River													
Total	597	194	40	1		30	330	105	220	388	745	505	3,154

The following table shows the amount of BITUMINOUS Coal sold during each month for consumption in Alberta:

Nest 88,411 86,584 102,970 111,285 100,386 100,101 20,997 21,704 21,215 24,655 20,003 21,525 20,997 21,704 21,215 24,655 20,003 21,525 20,997 21,705 24,359 22,879 31,381 34,144 31,552 10,384 13,009 12,337 12,416 10,447 9,977 9,977 9,872 12,416 10,447 9,977 9,977 9,872 12,416 10,447 9,977 9,977 9,972	95,1 22,8 34,7 19,3 10,2 10,2 189,9	90 87,103 80 20,108 44 40,279 119 22,222 9,733 446 8,927 8,9	94,626 20,739 36,169 18,184 10,625 7,348 187,691 187,691	90,288 21,762 37,151 19,379 9,364 11,845 189,789	68,159 18,339 16,714 15,047 2,652 8,272 129,183	94,255 99,256 14 22,711 17 20,411 52 9,328 72 9,930 83 165,891 consumption	1,119,358 242,583 359,878 264,144 109,205 124,626 2,219,794 in British
182,885 174,519 199,092 218,203 202,666 191,555 ring table shows the amount of BITUMINOUS Jan. Feb. Mar. April May June 13,563 5,602 6,307 4,488 3,729 3,434 103 93 355 262 103 93 355 262 253 103 93 355 262 253 103 4 253	Coal Jul.	11g	02	189,789 month		nsumption	i ii E
Jan. Feb. Mar. April May June 13,563 5,602 6,307 4,488 3,729 3,434 103 103 1,524 1,524 1,524 1,524 103 103 1,524 <	Coal	lold	0.2	month		nsumption	E. E.
13,563 5,602 6,307 4,488 3,729 3, 313 525 474 401 1,524			; 4 }	Oct.	Nov.		1 0 ca1.
103 355 262 1	3,434 3,173 34	73 4,023 34 33	4,476	3,409	2,258	2,299	56,761 6,541
		273 352 95 561	718	562	524 102	753	4,248 1,613
Total 13,980 6,127 6,874 5,244 5,519 3,687	3,687 3,575	75 4,969	6,571	4,938	3,786	3,893	69,163

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District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oet.	Nov.	Dec.	Total.
Crow's Nest Pass Canmore Brazeau	12,445	9,606	8,070	7,592 568 448	10,478	10,167 673 498	13,496 1,022 730	13,984 1,350 763	7,981 972 302	5,961 560 602	4,985 685 208	9,905 166 129	114,670 9,490 4,447
Jasper Park Yellowhead Pass Mountain Park	3,137	2,338	1,380	2,954	1,558	2,251	4,828	4,868	5,636	9,066	5,047	5,921 8,919	48,984 95,604
Total	21,807	16,060	14,193	17,257	17,550.	19,949	29,171	35,147	28,086	29,050	19,885	25,040	273,195
The following table sho	ring tabl	le shows	the amount of	unt of 1	BITUMINOUS		Coal sold	during	each mo	nth for	consum]	ption in]	during each month for consumption in Manitoba:
District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Crow's Nest	1,822	186	458	2,247	7,076	9,302	11,752	11,098	2,276	2,867	11,565		62,057
Brazeau				73	217	247	162	242	576	504	136		2,157
Jasper Park Yellowhead Pass Mountain Park	2,570	775	310	119	1,447	2,573 2,801	3,169	2,694	1,101 1,837 2,473	1,566 2,133	425 2,797	2,717	13,333 18,027 23,290
Total	5,019	2,597	2,342	2,733	9,875	15,028	18,474	16,869	14,527	13,896	14,923	3,849	120,132
	_						-						=

The following table shows the amount of BITUMINOUS Coal sold during each month for consumption in Ontario:

District	Jan.	Feb.	Mar.	Mar. April	May	June	July	Aug.	Sept.	Sept. Oct.	Nov.	Dec.	Total.
Crow's Nest Pass Canmore	 												
Yellowhead Pass Mountain Park	185												100
Total	185	1 1					1	1			-	-	185

The following table shows the amount of BITUMINOUS Coal sold during each month for consumption in United States:

Total.	130,082	130,082
Dec.	7,771	7,771
Nov.	11,007	11,007
Oct.	1,694	11,694
Sept.	15,710 1	12,473 15,710
Aug.	12,473	12,473
July	16,283	16,283
June	15,293	9,684 15,293
Мау	9,684	9,684
April May	11,271	7,598 11,271
Mar.	7,598	7,598
Feb.	4,756	4,756
Jan.		6,542
District	Crow's Nest Pass	Total

The following table shows the amount of Anthracite Coai, Briquettes and Coke respectively sold during each month for consumption in Alberta:

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Anthracite Briquettes Coke	1,892 6,982 1	1,897 5,760 30	2,202	835	786 8,414 33	864 4,750	1,211 5,983	1,174 4,564	1,302 4,080	1,155 4,818 110	638 4,409 55	985	14,941 71,519 232

The following table shows the amount of Anthracite Coat, Briquettes and Coke respectively sold during each month for consumption in British Columbia:

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Anthracite	- 396	403	207	862	263	356	599	448	409	482	326	426	5,177
Briquettes	- 379	274	61	1,438	172	119	223	505	485	231	115	366	4,368
Coke	- 2,669	2,240	2,934	3,345	3,266	3,112	3,190	3,358	2,995	2,257	1,095	764	31,225

The following table shows the amount of Anthracite Coai, Briquettes and Coke respectively sold during each month for consumption in Saskatchewan:

Anthracite 763 841 257 566 1,156 914 690 705 637 632 1,593 1,5 Briquettes 1,221 1,615 397 760 886 889 887 2,610 2,822 1,593 1,5 Coke		Јап.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
	Anthracite Briquettes Coke	763		257	760	1,156 886 78	914 889 33	690 887 33	2,610	637	632 1,593 88	1,269	1,111	7,700 16,060 232

The following table shows the amount of Anthracite Coal, Briquettes and Coke respectively sold during each month for consumption in Manitoba:

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Anthracite Briquettes Coke	219	104	387	416	664 416 33	448 838 33	1,807 107	394 1,647 144	87 241 99	631 391	33 670 33	76 949 30	3,308 7,710 870

The following table shows the amount of Anthracite Coal, Briquettes and Coke respectively sold during each month for consumption in Ontario:

Sept. Oct. Nov.	Aug. Sept. Oct. N	July Aug. Sept. Oct. N	June July Aug. Sept. Oct. N	May June July Aug. Sept. Oct. N	April May June July Aug. Sept. Oct. N	Aug. Sept. Oct.	
Sept.	Aug. Sept.	July Aug. Sept.	June July Aug. Sept.	May June July Aug. Sept.	April May June July Aug. Sept.	Mar. April May June July Aug. Sept.	
	Aug.	July Aug.	June July Aug.	May June July Aug.	April May June July Aug.	Mar. April May June July Aug.	Feb.

The following table shows the amount of Anthracite Coal, Briquettes and Coke respectively sold during each month for consumption in United States:

-	Jan.	Feb.	Mar.	April	May	June	July	Aug. Sept.	Sept.	Oct.	Nov.	Nov. Dec.	Total.
Anthracite			40.		1			1					40
Briquettes Coke		42		30							30		102

The following table shows	ing tabl	e shows	the amount of		DOMESTIC		used du	Coal used during each month under Colliery	h month	under (Colliery	Boilers:	
District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Creek - Lethbridge	6,290	6,029	5,712	6,888	6,392	6,278	6,267	6,735	6,236	6,989	6,524	6,936	77,276
Milk River	2,390	2,245	1,045	895	1,153	1,428	1,865	1,961	1,907	2,040	1,686	1,722	20,337
Medicine HatAldersyde					7		23	2	2	, ro	70	က	21
High River Drumheller Big Valley	4,627	1,841	1,935	1,405	2,863	3,670	4,380	4,449	4,274	3,859	4,407	4,063	41,773
Hanna	54	51	20	37	41	<u> </u>	49	48	48	09	29	51	588
Trochu Three Hills	185	35	15 85	45	200 206	181	108	110	97	53	42 180	105	113 624 $1,848$
Battle River						1 1							
Camrose	124	111 53	70	33	75	72	150	75	65	171	159	180	1,245
Clover Bar	1,611	1,401	1,240	1,248	1,372	1,430	1,665	1,608	1,428	1,601	1,648	1,411	17,663
Namao	45.	57	26	30	08	34	36	36	35	40	34	32	10,010
Wabamun	1,319	1,174	1,168	1,032	1,024	98	1,137	958	1,213	1,231	951	1,095	13,266
Pembina	1,035	701	593	379	405	358	307	372	342	812	674	835	6,813
							- -					 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total	18,648	14,774	12,903	12,831	14,440	15,371	17,021	17,513	16,859	18,345	17,669	17,774	194,148

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District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Crow's Nest -	6	i i	60		9	7 405	7 067	A 99E	9 846	4.079	4 477	4.731	60.651
Tass	1,104	1.160	1.167	1.196	1.178	1,221	1,336	1,362	1,438	1,421	1,542	1,283	15,408
Srazean		544	509	542	468	482	443	470	455	202	480	542	5,991
asner Park		418	398	390	431	454	246	54	555	296	624	200	5,259
Pass Pass		1.034	1.025	1.015	1.004	935	1.038	1,108	1,105	1,153	876	935	12,229
Mountain Park		749	817	825	805	808	903	864	902	880	843	915	10,130
Total	10.332	9.779	10,241	9.791	9,256	9,305	8,033	8,153	8,304	8,636	8,842	8,996	109,668

28,837 Total. The following table shows the amount of ANTHRACITE Coal used during each month under Colliery Boilers: Dec. Nov. 2,244 Oct. 2,340 2,294 July June 2,751 Jan. Banff District

OUTPUT AND NUMBER OF MINES PRODUCING.

	10,1	Under 10,000 Tons	- 01	From 10,000 to 50,000 Tons		From 50,000 to 100.000 Tons	101	100,000 to 200,000 Tous	200	Tons Tons	30.	700.000 to 400.000 Tous	.50	100,000 to 500,000 Tons		Total
	ò	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	, o	Output	o N	Output
Domestic	243	223,233 3,560	29	667,357	13	928,192	ಗ್ರಣ⊣	559,480 444,001 131,225	H.44	293,659 1,063,654	1107	363,140 688,240	1	434,863	292 24 1	3,035,061 2,982,334 131,225
Total	250	226,793 34	34	806,592	16	806,592 16 1,136,973		9 1,134,706		5 1,357,313		3 1,051,380	-	434,863	317	6,148,620

In addition to the mines shown in above table as being in operation, two copper mines and two shale mines were operated during the year 1918.

The following table shows the classification of persons employed in the DOMESTIC, BITUMINOUS and ANTHRACITE Coal Fields, at December 31, 1918:

			UNDER	JNDERGROUND					ABC	ABOVEGROUND	ΔÞ			Total Under-
٠	Super- vision	Miners and Helpers	Haulage Employ-	Mechan's and Skilled Labour	Others	Total	Super- vision	Mechan's and Skilled Labour	Clerical Assist- ance	Others	Coke Ovens	Briquette Plant	Total	ground and Above- ground
Domestic Bituminous Anthracite	218 143 9	2,828 1,565 86	676 470 9	222	428 496 30	4,372 2,728 134	115 45 1	387 240 39	112 67 7	1,087 746 105	13	111	1,701 1,111 163	6,073 3,839 297
Total	370	4,479	1,155	276	954	7,234	161	999	186	1,938	13	11	2,975	10,209

The following table shows the classification of persons employed in the DOMESTIC Coal Field at December 31, 1918:

			UNDERGROUND	ROUND				A B	ABOVE GROUND	IND		1
Districts	Super- vision	Miners and Helpers	Haulage Employ- ees	Mech's and Skilled Labour	Others	Total	Super- vision	Mech's and Skilled Labour	Clerical Assist.	Others	Total	Total Undergroud and Above Ground
Pincher Creek	ಣ	20		 		23		-		81	က	26
Lethbridge	28	671	225	115	88	1,157	16	144	21	254	435	1,592
Magrath	6	c	1 1 1 1 1 1	-	-	46.3		1	1	000	6	
Milk KiverTaber	. 1	237	34	6	24.	318	4 o o	21	8	51	88	406
Bow Island	4	19				23		1		~	7	25
Medicine Hat	က	25	ıc	87	9	41	81			∞ ₁	#	52
Aldersyde	က	13			1 1 1 1 1 1 1 1	22	 -				m +	25
High River	78	 855		56	129	1353	34	103	34	357	528	1.881
Drummelier	°F	43	1 4	2	2	1, 20 20 20		er:	-	15	8	02
Dig valley	16	30	٠,-	1		3 65	l ,				Н	34
Drucks	10	4.0	1 675		-	89	2	8	Н	7	23	91
(acombe	100	32	23	1	1	39	4	60	7	67	11	20
Trochu	9	36	Н	1	1	43	00	2	2	19	31	74
Three Hills	က	32	4	+	က	43	83	87	-	9	11	54
Carbon	က	15		1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	18	, - 1	1 1 1	1		H	19
Battle River	67	38		1 1 1 1 1 1		40		1		63	က	43
Camrose	2	29	6	1 1 1 1		82	9 .	22	9	35	69	151
Tofield		4				ro	~	1	e0	20	26	- 61
Clover Bar	19	205	41	16	86	379	2	25	∞	83	123	505
Edmonton	10	117	22	9	12	167	ಣ	18	13	21	25	222
amao	67	29	∞			40	~7	e0		∞	13	23
Cardiff	ro	148	23	∞	45	229		14	2	109	135	364
Wabamun	ಣ	34	6	-	က	20	ಣ	4	-	15	23	73
Pembina	ro	20	13	∞	21	26	e0	90	4	31	46	143
Peace River				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1							
Total	218	2.828	929	222	428	4.372	115	387	112	1.087	1,701	6.073

The following table shows the classification of persons employed in the BITUMINOUS Coal Field at December 31, 1918:

Total	Underground and Above Ground	1,721 ,335 486 611 452 334	3,839
	Total	465 118 103 85 237 103	1,111
	Coke Ovens	13	13
ROUND	Others	319 73 73 56 180 68	746
ABOVE GROUND	Clerical Assist- ance	21 11 6 11 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	29
	Mech's and Skilled Labour	96 330 118 22	240
	Super- vision	0 4 70 50 8 70	45
	Total	1,256 217 383 426 215 231	2,728
	Others	315 499 119 123 48	496
ROUND	Mech's and Skilled Labour	4 4 8 S S S S S S S S S S S S S S S S S	54
UNDERGROUND	Haulage Employ-	217 455 456 47	470
	Miners and Helpers	648 102 234 306 153	1,565
	Super- vision	525554 525554	143
	Name of District	Crow's N. Pass. Canmore Brazeau Jasper Park Yellowhead Pass	Total

The following table shows the classification of persons employed in the ANTHRACITE Coal Field at December 31, 1918:

		-	UNDERGROUND	ROUND					ABOVE GROUND	ROUND		-	£
Name of District	Super- vision	Miners and Helpers	Haulage Employ-	Mech's and Skilled Labour	Others	Total	Super- vision	Mech's and Skilled Labour	Clerical Assist- ance	Others	Briquette Plant	Tote 1	Underground and Above Ground
Banff	6	98	6		30	134	н	39	2	105	11	163	297

The following table shows the average number of persons employed during each month in the DOMESTIC Coal Field,

above and below ground:	round:			1								
District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	7	19	7	×		7	12	13	11	19	22	26
Fincher Creek	4 6	e e e	T T T	1 996	1 201	1 228	1 391	1.385	1.389	1.436	1,365	1,592
retubridge	1,538	1,593	1,00,1	1,000	1,001	T,000	1,00		4	4	4	က
Magrath	٥ إ	70 7	 	٠ ټ		1 1 1	30		35.	32	47	55
Milk River	72	7.7	22	7.7	550	100	00.0	100	006	402	347	406
Taber	488	420	398	185	206	299	356	2.00	666	70#	160	26
Bow Island	25	22	21	12	13	16	1 <u>6</u>	17	0 5	075	4 F	2 H
Medicine Hat	41	28	18	13	15	24	38	68	55	19	Te	0 0 1 1
Aldersyde	21	20	18	11	12	18	19	16	17	97	35	67
High River	87	67	2	-	Н	က	4	21	-	ر م	٠, ٩	4, 19
Drumheller	1.604	1.385	1.247	441	1,043	1,380	1,755	1,725	1,721	1,645	1,591	1,881
Big Valley	74	1.22	80	17	26	35	40	36	39	20	55	20
Brooks	×	9	ī	11	10	10	11	13	21	28	25	34
Hanna	72	67	5.7	26	26	32	32	26	34	84	82	91
Lacomba	20		14	8	22	15	16	17	25	37	52	. 50
Trochi	49	47	32	16	21	14	30	27	41	52	59	74
Three Hills	7.7	782	63	28	36	48	55	54	49	20	59	54
Carbon	1.7	17	13	11	14	16	12	15	16	20	24	13
Battle River	68	4.	25	1	4	∞	4	က	∞	31	42	43
Camrose	125	116	89	48	44	44	52	65	06	102	120	151
Tofield	121	80	20	34	26	79	92	86	88	66	62	61
Clover Bar	532	470	308	213	230	315	425	432	424	429	479	502
Edmonton	287	259	178	131	128	187	208	189	209	232	260	222
Namao	.c.	26	36	19	19	20	33	41	38	46	22	53
Cardiff	377	359	257	209	188	204	216	225	267	276	268	364
Wabamin	54	54	36	19	21	19	27	30	32	52	09	73
Pembina	155	136	84	69	94	122	132	131	146	144	141	143
Peace River			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1								1
Total	5,883	5,472	4,587	2,895	3,576	4,304	4,629	5,001	4,795	5,394	5,340	6,073
												Manage of the second se

The following table shows the average number of persons employed during each month in the BITUMINOUS Coal Field, above and below ground:

Dec.	1,721 335 486 511 452 334 3,839
Nov.	1,485 341 267 468 315 316 3,192
Oct.	1,759 324 455 528 443 310 3,819
Sept.	1,741 339 475 518 347 272 3,692
Aug.	1,812 334 465 476 284 274 3,645
July	1,803 287 287 441 283 265 3,511
June	1,858 300 406 442 247 2,247 3,539
May	1,844 286 317 507 253 267 3,474
April	1,950 299 435 445 268 310
Mar.	1,820 295 480 520 266 320 3701
Feb.	1,840 305 481 505 282 312 3,725
Jan.	1,859 298 460 482 298 316
District.	Crow's Nest Pass. Canmore Brazeau Jasper Park Yellowhead Pass Mountain Park

The following table shows the average number of persons employed during each month in the ANTHRACITE Coal Field, above and below ground:

Dec.	297	, BITU-
Nov.	285	DOMESTIC,
Oct.	295	in the DC
Sept.	290	month in
Aug.	289	each
July	279	during
June	266	ows the average number of persons employed
May	284	f persons
April	276	umber o
Mar.	285	verage n
Feb.	291	ows the
Jan.	293	table sh
District.	Banff	The following table sho

MINOUS and ANTHRACITE Coal Fields, above and below ground:

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Domestic Bituminous Anthracite	5,883 3,713 293	5,472 3,725 291	4,587 3,701 285	2,895 3,707 276	3,576 3,474 284	4,304 3,539 266	4,629 3,511 279	5,001 3,645 289	4,795 3,692 290	5,394 3,819 295	5,340 3,192 285	6,073 3,839 297
Total	9,889	9,488	8,573	6,878	7,334	8,109	8,419	8,935	8,777	9,508	8,817	10,209

PER CAPITA PRODUCTION OF MINES IN THE PROVINCE.

Year	Gross Tons of Coal Mined	Total No. of Men Employed	Tons of Coal Mined Per Man	No. of Men Employed Underground	Tons of Coal Mined per Mar Employed Underground
1906	1.385,000	2.800	494	2,000	692
1907	1,834,745	3,600	509	2,700	679
1908	1,845,000	3,780	488	2,681	688
*1909	2,174,329	5,207	417	3,893	566
1910	3,036,757	5,818	504	4,090	742
**1911	1,694,564	6,689	253	4,517	375
1912	3,446,349	6,661	517	4,861	708
1913	4,306,346	8.068	533	5,837	737
1914	3,821,739	8,170	467	6,052	631
1915	3,434,891	6,445	532	4,493	764
1916	4,648,604	7,570	614	5,536	839
**1917	4,863,414	8,310	595	6,047	804
1918	6,148,620	8,818	697	6,141	1,001

*During the year 1909 a strike affecting all the larger mines in the Province lasted for a period of three months.

**During the year 1911 a strike affecting all the larger mines in the Province lasted for a period of eight months.

***During the year 1917 a strike affecting all the larger mines in the Province lasted for a period of three months.

PER CAPITA PRODUCTION OF MINES IN THE DOMESTIC COAL FIELD.

Year	Gross Tons of Coal Mined	No. of Men Employed Underground	Total No. of Men Employed	Tons of Coal Mined per Man Employed Underground	Tons of Coal Mined per Man Employed
191 0	878,011	1,676	2,307	524	380
1911	964,700	2,488	3,548	391	271
1912	1,341,389	2,283	2,980	587	450
1913	1,763,225	2,929	4,017	601	438
1914	1,697,401	3,190	4,219	532	402
1915	1,682,922	2,210	3,181	761	529
1916	2,172,801	3,137	4,132	692	525
1917	2,537,829	3,489	4,701	. 727	539
1918	3,035,061	3,420	4,896	887	619

PER CAPITA PRODUCTION OF MINES IN THE BITUMINOUS COAL FIELD.

Ye ar	Gross Tons of Coal Mined	No. of Men Employed Underground	Total No. of Men Employed	Tons of Coal Mined per Man Employed Underground	Tons of Coal Mined per Mar Employed
1910	1,896,961	2,076	2,981	914	636
1911	649.745	1,820	2,641	357	246
1912	1,926,371	2,353	3,243	818	594
1913	2,374,401	2,645	3,562	897	666
1914	1,953,367	2,632	3,529	742	553
1915	1,626,237	2,103	2,921	773	557
1916	2,335,259	2,258	3,142	1,034	743
1917	2,206,868	2,429	3,335	909	661
1918	2,982,334	2,597	3,636	1,109	820

PER CAPITA PRODUCTION OF MINES IN THE ANTHRACITE COAL FIELD.

Year	Gross Tons of Coal Mined	No. of Men Employed Underground	Total No. of Men Employed	Tons of Coal Mined per Man Employed Underground	Tons of Coal Mined Per Man Employed
1910	261,785	338	530	774	493
1911	80,119	209	500	383	160
1912	178,589	225	438	793	407
1913	168,720	263	489	641	345
1914	170,971	230	422	743	405
1915	125,732	180	343	698	366
1916	140,544	141	296	996	474
1917	118,717	129	284	920	418
1918	131,225	124	286	1,058	458

The tables showing the number of men employed in the Bituminous Coal Field include employees at the Coke Ovens, and in the Anthracite Coal Field employees at the Briqueting Plant.

PER CAPITA PRODUCTION OF MINES IN THE DOMESTIC COAL FIELD BY DISTRICTS.

Districts	Gross Tons of Coal Mined	No. of Men Employed Undergr'nd	Total No. of Men Employed	Tons of Coal Mined Per Man Employed Undergr'nd	Tons of Coal Mined Per Man Employed
Pincher Creek	3,955	12	14	329	282
Lethbridge		1.001	1.429	856	599
Magrath		3	3	542	542
Milk River		27	33	978	207
Taber		272	359	674	511
Bow Island		19	20	383	364
Medicine Hat		27	36	704	528
Aldersyde		18	19	448	424
High River		2	3	285	190
Drumheller		1,009	1.451	873	607
Big Valley		36	49	964	708
Brooks	9,783	16	18	611	543
Hanna	29,533	37	53	798	557
Lacombe		30	35	506	434
Trochu	18,248	25	39	729	467
Three Hills	30,150	43	54	701	558
Carbon	5.431	15	16	362	339
Battle River	12,203	19	20	642	610
Camrose	56,597	49	85	1,155	665
Tofield	66,054	-3	76	22,018	869
Clover Bar	264,868	298	396	888	668
Edmonton	106,756	159	208	671	513
Namao	21,660	29	39	746	555
Cardiff	266,142	166	277	1,602	599
Wabamun	19,250	25	39	770	493
Pembina	109,429	80	125	1,367	875
Peace River					
Total	3,035,061	3,420	4,896	887	619

PER CAPITA PRODUCTION OF MINES IN THE BITUMINOUS COAL FIELD BY DISTRICTS.

Districts	Gross Tons of Coal Mined	No. of Men Employed Undergr'nd	Total No. of Men Employed	Tons of Coal Mined Per Man Employed Undergr'nd	Tons of Coal Mined Per Man Employed
Crow's Nest Pass	1,601,486	1,305	1,799	1,226	376
Canmore	274,709	202	312	1,359	874
Brazeau	371,562	320	429	1,161	866
Jasper Park	283,342	395	487	717	581
Yellowhead Pass	195,972	182	314	1,076	624
Mountain Park	255,263	193	295	1,322	865
Total	2,982,334	2,597	- 3,636	1,109	820

PER CAPITA PRODUCTION OF MINES IN THE ANTHRACITE COAL FIELD BY DISTRICTS.

	District	Gross Tons of Coal Mined	No. of Men Employed Undergr'nd	Total No. of Men Employed	Tons of Coal Mined Per Man Employed Undergr'nd	Tons of Coal Mined Per Man Employed
Banff		131,225	124	286	1,058	458

The following table shows the number of days in each month on which DOMESTIC Coal was drawn:

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Total.	295 268 271 274 271 290	. 23.9
Dec.	22 23 23 21 22 22 23 23 23 23 23 23 23 23 23 23 23	22.0
Nov.	4.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	22.3
Oct.	222663	25.1
Sept.	22 22 22 22 22 22 24 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25	23.8
Aug.	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	24.8
July	220 220 220 220 220	23.6
June	2 1 2 2 2 2 7 4 8 7 4	23.0
May	2122222	22.5
April	2 1 2 2 2 2 4 8 6 8 6 8 6 8 6 8 8 8 8 8 8 8 8 8 8 8	22.1
Mar.	222222	23.1
Feb.	24 21 19 19 23	20.8
Jan.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	24.6
District	Crow's N. Pass Canmore Brazeau Jasper Park Yellowhead Pass	Average No. of days worked

The following tab	ng tabl	de shows the number of days in each month on which ANTHRACITE Coal was drawn:	the num	per of da	ays III ea	ich mont	тм по п	IICII TAIN	IHRACI	000			
District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept. Oct.	Oct.	Nov.	Dec.	Total.
	13	14	14	14	13	13	13	13	12	13	10	12	154

The following table shows the amount of mine timber used during the year:

DOMESTIC COAL FIELD.

				,
Districts	Round Timber Lineal Feet	Square Timber Square Feet B. M.	Slabs	Cordwood No. of Cords
Pincher Creek	23,076	}		
Lethbridge	3,893,985	3,182,119	135	1,667
Magrath	8,000	[]		
Milk River	24,939	933		
Taber	543,002	28,363		
Bow Island	15,818	300		
Medicine Hat	41,845			
Aldersyde	35,152	7,804		
High River	6,623			
Drumheller	1,551,465			
Big Valley	76,254			
Brooks	45,500	160		
Hanna	44,978			[
Lacombe	53,388		60	·
Trochu	54,984]
Three Hills	63,280			
Carbon	9,770			
Battle River	21,570			
Camrose	155,800			
Tofield	7,000			
Clover Bar	781,074			1
Edmonton	422,240	, , , , , , , , , , , , , , , , , , , ,		
Namao	118,506			
Cardiff	109,188			İ
Wabamun	64,600			
Pembina	387,622			
Peace River]
Total	8,559,659	3,229,679	195	1,667

BITUMINOUS COAL FIELD.

Districts	Round Timber Lineal Feet	Square Timber Square Feet B. M.	Lagging	Cordwood No. of Cords
Crow's Nest Pass	2,655,993 192.076	1.040,049		
Brazeau	1,056,564	}		1,529
Jasper Park Yellowhead Pass	$580,400 \\ 378,060$		3,800	
Mountain Park	1,109,534		400,000	
Total	5,972,627	1,040,049	403,800	1,529

ANTHRACITE COAL FIELD.

District	Round Timber Lineal Feet	Square Timber Square Feet B. M.	Slabs Cords	Cordwood No. of Cords
Banff	152,132			580

EXPLOSIVES.

The following table shows the quantity of Explosives used in pounds for blasting coal in the DOMESTIC Coal Field:

	NAME OF EXPLOSIVE						
Districts	Monobel No. 1	Black Powder	Polar Permi- tite	Dyna- mite	Stump- ing Powder	No. 1	Total
Pincher Creek	185	450	1,162				1,797
Lethbridge		77,504		20,409		15,033	
Magrath				1			740
Milk River							6.263
Taber		55,900					56,100
Bow Island		5,141			,		11 21
Medicine Hat							14,250
Aldersyde	1	2,535	1				2,535
High River	50	2,000			J		50
Drumheller	35 732	231,862	L		l .	L	
Big Valley							1,500
Brooks					1		6.733
Hanna			,		,	, ,	15,243
Lacombe							3,288
Trochu							8,025
Three Hills			1		1	3	14,558
Carbon							4,015
Battle River		20	,		J	1	20
Camrose		50	1				150
Tofield				1,050	700		3,625
Clover Bar		39,956		_, _,,,,,	900		48,336
Edmonton		8,015	650				21,784
Namao		25					75
Cardiff		52,000					71.218
Wabamun :		02,000					407
Pembina				~		50	17,071
Peace River							
Total	195 099	544,862	1 219	22,235	1,600	15,083	710.625

The following table shows the quantity of Explosives used in pounds for blasting coal in the BITUMINOUS Coal Field:

	NAME OF EXPLOSIVE						
Districts	Monobel No. 1	Polar Permi- tite	Dупа- mite	Viking No. 1	Dynobel No. 2		Tota1
'Crow's N. Pass	65,676	16,117			 101,83 9		183,633
Canmore	10,920	[45,500	l		56,420
Brazeau	4,500						4,500
Jasper Park	16,645	230		4,300		[21,173
Yellowhead Pass	48,399	531		4,100	3,352		56,382
Mountain Park	26,402	650					27,052
Total	172,542	17,528		53,900	105,191		349,161

The following table shows the quantity of Explosives used in pounds for blasting coal in the Anthracite Coal Field:

		NAME OF EXPLOSIVE	П
District	Monobel No. 1		Tota1
Banff	29,850		29,850

The following table shows the number of tons of DOMESTIC coal produced per pound of explosive used for blasting coal:

Districts	No. of Tons Mined	No. of Lbs. of Explosives U. ed	Tons of ('oal Mined Per Lb of Explosive Used
Pincher Creek	3,955	1,797	2.2
Lethbridge	857,092	140,107	6.0
Magrath	1,627	740	2,2
Milk River	6,848	6,263	1.1
Taber	183,485	56,100	3.3
Bow Island	7,283	5,141	1.4
Medicine Hat	19,028	14,250	1.3
Aldersyde	8,069	2,535	3.1
High River	570	50	11.4
Drumheller	881,081	267,594	3.2
Big Valley	34,718	1,500	23.1
Brooks	9,783	6,733	1.5
Hanna	29,533	15,243	1.9
Lacombe	15,201	3,288	4.6
Trochu	18,248	8,025	2.2
Three Hills	30,150	14,558	2.0
Carbon	5,431	4,015	1.3
Battle River	12,203	20	610.1
Camrose	56,597	150	377.3
Tofield	66,054	3,625	15.4
Clover Bar	234,863	48,336	5,5
Edmonton	106,756	21,784	4.9
Namao	21,660	75	288.8
Cardiff	266,142	71,218	3.7
Wabamun	19,250	407	47.3
Pembina	109,429	17,071	6.4
Peace River			
Total	3,035,061	710,625	4.3

The following table shows the number of tons of BITUMINOUS coal produced per pound of explosive used for blasting coal:

Districts	No. of Tons Mined	No. of 1,bs. of Explosives Used	Tons of Coal Mined Per Lb. of Explosive Used
Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass Mountain Park	1,601,486 274,709 371,562 283,342 195,972 255,263	183,632 56,420 4,500 21,175 56,382 27,052	8.7 4.8 82.5 13.4 3.4 9.4
Total	2,982,334	349,161	8.5

The following table shows the number of tons of ANTHRACITE coal produced per pound of explosive used for blasting coal:

District	No. of Tons Mined	No. of Lbs. of Explosives Used	Tons of Coal Mined Per Lb. of Explosive Used	
Banff	131,225	29,850	4.4	

Estimated number of shots fired for blasting coal in the DOMESTIC Coal Field:

Districts	Squibs	Fuse	Electric Detonator	Electric Squib	Total
Pincher Creek	560	5,854			6,414
Lethbridge	36,639	20,411	75,092	34,000	166,142
Magrath	1,270	1	./		1,270
Milk River	7,431	961			8,392
Taber	55,000	670			55,670
Bow Island	6.240		.		6,240
Medicine Hat	9,030	215	40		9,285
Aldersyde	0.0		.		6,875
High River		43		·	43
Drumheller		44,448	45,451		97.079
Big Valley		206	10,-0-		206
Brooks	6,450	10			6,460
Hanna	0,100	15.407	1		15,407
Lacombe	664	1.482			2,146
Trochu		5,259			11,344
Three Hills	1,190	3,987			5.177
Carbon	3,490	500			3,990
Battle River		10			10
Camrose	i i	100	100		200
Tofield		2,720	100		2.720
Clover Bar		24,997	10,741		35,738
Edmonton		4,831	25,542		30,373
Namao		190	20,012		190
Cardiff		59,519	160		59.679
Wabamun		300	100		300
Pembina		900	15,396		15.396
Peace River	1		10,000		15,500
reace itivel					
Total	148,104	192,120	172,522	34,000	546,746

Estimated number of shots fired for blasting coal in the BITU-MINOUS Coal Field:

Districts	Squibs	Fuse	Electric Detonator	Total
Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass Mountain Park		440 6,760 	214,513 55,000 2,012 32,505 35,357 42,533	214,513 55,440 8,772 32,505 36,457 42,533
Total		8,300	381,920	 390,220

Estimated number of shots fired for blasting coal in the ANTH-RACITE Coal Field:

***************************************	District		Electric Detonator	Total
Banff		 	30,547	 30,547

Number of Miss-Fire Shots recorded in blasting coal in the DOMESTIC Coal Field:

Districts	METHOD OF SHOT-FIRING						
	Squib	Fuse	Electric Detonator	Electric Squib	Total		
Pincher Creek	3	3	 		6		
Lethbridge	9	8	67	350	434		
Magrath	2			- !	2		
Milk River	93				98		
Taber		2			2		
Bow Island	1 .				1		
Medicine Hat					ē		
Aldersyde			·{		101		
High River		2			101		
Drumheller		56			56		
Big Valley					9(
Brooks							
Hanna		10			22		
Lacombe		10			22		
Trochu		188			202		
Three Hills		100]		25		
Carbon					20		
Battle River							
Camrose							
Tofield							
Clover Bar		12			12		
Edmonton			16		21		
Namao		_			_		
Cardiff		51			 51		
Wabamun		3			91		
		-	27		27		
Pembina Peace River			, ,		41		
Peace River							
Total	266	340	110	350	1,066		

Number of Miss-Fire Shots recorded in blasting coal in the BITUMINOUS Coal Field:

	METHOD OF SHOT-FIRING						
Districts	Fuse	Electric Detonator		Total			
Crow's Nest Pass Canmore Brazeau Jøsper Park	14	222 46 4 3		222 46 18 3			
Yellowhead Pass		11 36		11 36			
Total	_ 14	. 322		336			

Number of Miss-Fire Shots recorded in blasting coal in the ANTHRACITE Coal Field:

•		METHOD OF SHOT-FIRING				
	District			Electric Detonator		Total
Banff				22		22

The following table shows the quantity of explosives used in pounds for blasting rock in Coal Mines in the Province:

	NAME OF EXPLOSIVE						
Districts	30% Dyna- mite	60% Dyna- mite	Black Powder	Monebel No. 1	Polar Permi- tite	Total	
Crow's Nest Pass	101				11,459	11,560	
Pincher Creek	2	1		25	370	397	
Lethbridge	1.379		45		l .	1,424	
Magrath	([
Milk River	50	l	1			50	
Taber	1,990	1	525	25	60	2,600	
Bow Island		1	40	l		92	
Medicine Hat	100					100	
Aldersyde				145		165	
High River			,	1	}	359	
Canmore			360		10,000	11,860	
Banff					26,650	26,650	
Drumheller					20,000	5,233	
Big Valley						1 5,255	
Brazeau					658	1,258	
Brooks	3			000		3	
Hanna			30			230	
Lacombe			,			230	
Trochu						2,000	
Three Hills				, -		2,000	
Carbon			2			2	
Battle River						4	
Camrose							
Tofield			~				
		1		572		572	
Edmonton					100	212	
/				48	100	48	
)	1		48	
						ļ	
Wabamun			~				
Pembina					C 055	7 545	
Jasper Park	590				6,955	7,545	
Yellowhead Pass	40				3,300	3,340	
n /	1,080				235	1,315	
Peace River							
Total	7,951	1,500	1,002	6,775	59,787	77,015	

Estimated number of Shots fired for blasting rock in Coal Mines in the Province:

Districts	Electric Detonator	Electric Squib	Fuse	Squib	Tota1
Crows Nest Pass		 	284		10,382
Pincher Creek				850	850
Lethbridge	570]	1,206	30	1,806
Magrath			-	[
Milk River			40		40
Taber	45]	2,655] 470	3,170
Bow Island			141	65	206
Medicine Hat			430		430
			215		215
High River		[765		765
Canmore	10,000]	534]	10,534
Banff	19,553	[[19,553
Drumheller					4,266
Big Valley[[-	
Brazeau	922		1,575		2,497
Brooks			95		95
Hanna]				30	30
Lacombe			[[
Frochu			700		700
Γ hree Hills[į.		-	
Carbon_]]	j 5 j	5
Battle River[[-	
Camrose				-	- -
				[].	
Clover Bar	934		182		1,116
Edmonton	123		180	J	303
Namao	60]		60
				- -	
Wabamun]			15		15
Pembina(
Jasper Park	6,690]	5,295		11,985
Yellowhead Pass					2,990
Mountain Park	551		500		1,051
Peace River				-	
Total	56,802		14,812	1,450	73,064

The following table gives the number of Miss-Fire Shots recorded in blasting rock in Coal Mines in the Province:

					
Districts	Electric Detonator	Electric Squib	Fuse	Squib	Total
Crows Nest Pass					•
Pincher Creek					
Lethbridge					
Magrath					
Milk River				[2
Taber			7]] 10
Bow Island					
Medicine Hat					
Aldersyde			[
High River			6		6
Canmore	3		2		5
Banff	17	1			17
Drumheller		1	1		46
Big Valley			1	,	
Brazeau				1	6
Brooks	1 -		2		ž
Hanna			ĺ		ĩ
Lacombe					1
Trochu				40	40
Three Hills				40	,
		J			
Carbon]
Battle River					
	1				
Tofield					
Clover Bar	5				5
Edmonton					
Namao					
Cardiff					
Wabamun]		
Pembina					
Jasper Park					
Yellowhead Pass	2][2
Mountain Park					
Peace River					
10000 101101 111111					
					`
Total	90	}	20	40	150

No statistics are available as to the cause of miss-fires.

ELECTRICITY.

The Rules for the Installation and Use of Electricity in or about mines require a return to be made to the Department on or before January 21st of each year, giving size, type and any other particulars which may be required of electrical apparatus in use above and below ground. According to the returns received from the different mines, electricity was used at 40 mines in 1918. A summary of these returns regarding the horse-power of electrical apparatus in use is given below:

	No. of Mines	Horse-power of Apparatus	Total	
District	Using Electricity	Above Ground	Below Ground	Horse-Power
Crow's Nest Pass Pincher Creek	6	2,958	365	3,323
Lethbridge	5	938	340	1,278
Milk River		115	343	458
Bow Island Medicine Hat	1	7		7
AldersydeHigh River				
CanmoreBanff	1	315 150		315 150
Drumheller Big Valley	7	500	250	750
Brazeau Brooks	1	445		445
Hanna				
Lacombe Trochu				
Three Hills				
Battle River				
Tofield	1 	12	3	15
Clover Bar Edmonton	$\begin{bmatrix} 2 \\ 1 \end{bmatrix}$	55 37	101 30	156 67
Namao	2		150	150
Wabamun	1	17½	1	181/2
Pembina Jasper Park	$\begin{array}{c c} 1 \\ 2 \end{array}$	118 307	301	419 307
Yellowhead Pass	$egin{array}{c c} \hline 3 & [\\ 2 &] \end{array}$	445 (115	32½ 55	477½ 170
Peace River				
Total	40	6,5341/2	1,9711/2	8,506

A closer estimate of the extent to which electricity is used in the different districts may be made by considering the number of tons of coal raised per electrical horse-power employed in all mines under The Mines Act. The following table will give this information:

TONS OF COAL PER ELECTRICAL HORSE-POWER EMPLOYED.

District	Tons of Coal Mined in 1918	Above Ground	Below Ground	Total Above and Below Ground
Crow's Nest Pass	1,601,486	541	4,387	481
Pincher Creek	3,955	[[
Lethbridge	857,092	913	2,520	670
Magrath	1,627	[[[
Milk River	6,848	[Í
Taber	183,485	1,595	337	400
Bow Island	, 7,283	[İ
Medicine Hat	19,028	2,718		2,718
Aldersyde	8,069	[
High River	570			
Canmore	274,709	872	-	872
Banff	131,225	874		874
Drumheller	881,081	1,762	3,524	1,175
Big Valley	34,718	[
Brazeau	371,562	834		834
Brooks	9,783	[
Hanna	29,533	l		
Lacombe	15,201	\		
Trochu	18,248			_~
Three Hills	30,150			
Carbon	5,431	11		
Battle River	12,203			
Camrose	56,597	4,716	18,865	3,773
Tofield	66,054			
Clover Bar	264,868	4,814	2,622	1,697
Edmonton	106,756	2,885	3,557	1,593
Namao	21,660	[
Cardiff	266,142	1	1,774	1,774
Wabamun	19,250	1,100	19,250	1,040
Pembina	109,429	936	363	261
Jasper Park	283,342	923		923
Yellowhead Pass	195,972	440	60,029	410
Mountain Park	255,263	222	4,641	963
Peace River		íí		

This table is useful to show by comparison with other years the growth or decline in the use of electricity in the Province as a whole and in each district taken separately.

The number of electrically driven coal-cutting machines in use at the end of the year was twenty-four.

No accidents were reported in connection with the use of electricity during the year.

ANNUAL REPORT, 1918

COAL-CUTTING MACHINERY.

District	No. of Coa Machines C			of Coal ed by
	Electricity	Compressed Air	Electricity	Compressed Air
Crow's Nest Pass				
Pincher Creek				,
Lethbridge		103		629,947
Magrath				
Milk River				
Taber	1 '	37	14,960	135,408
Bow Island	'l			Í
Medicine Hat	2	3		6,857
Aldersyde[[
High River				
Canmore				
Banff				İ
Drumheller	8	24	214,899	317,750
Big Valley	[
Brazeau				
Brooks				
Hanna				1
Lacombe				
Trochu		2		5,214
Three Hills		4		24,984
Carbon				
Battle River				
Tofield				
Clover Bar	3	6	56,000	70,000
Edmonton]		7 j		54,510
Namao				
Cardiff	5		146,612	
Pembina	5		108,909	
Jasper Park				
Yellowhead Pass		7		83,796
Mountain Park				
Peace River				
Total	24	193	541,380	1,328,466

The following tables are taken from reports issued by the Department of Mines, Ottawa. It will be noted, however, that the amount of coal stated in these tables as being produced each year differs slightly from the amount shown by the provincial reports. The particulars for the year 1918 have not yet been received.

ANNUAL PRODUCTION OF COAL IN ALBERTA.

Calendar Year	Short Tons	Value	Average Fer Tor
1887	74,152	\$ 157,577	\$2.13
1888	115,124	183,354	1.59
1889	97,364	179,640	1.85
1890	128,753	198,298	1.54
1891	174,131	437,243	2.51
1892	178,970	460,605	2.57
1893	230,070	586,260	2.55
1894	184,940	473,827	2.56
1895	169,885	382,526	2.25
1896	209,162	581,832	2.78
1897	242,163	630,408	2.60
1898	315,088	788,720	2.50
1899	309,600	774,000	2.50
1900	311,450	778,625	2.50
1901	340,275	850,687	2.50
1902	402,819	960,601	2.38
1903	495,893	1,117,541	2.25
1904	661,732	1,404,524	2.12
1905	931,917	1,993,915	2.14
1906	1,246,360	2,614,762	2.10
1907	1,591,579	3,826,286	2.41
1908	1,685,661	4,127,311	2.45
1909	1,994,741	4,838,109	2.43
1910	2,894,469	7,065,736	2.44
1911	1,511,036	3,979,264	2.63
1912	3,240,577	8,113,525	2.50
1913	4.014.755	10.418.941	2.59
1914	3,683,015	9,350,392	2.54
1915	3,360,818	8,283,079	2.46
1916	4,559,054	11,386,577	2.50
1917	4,736,368	14,153,685	2.99

MINERAL PRODUCTION IN ALBERTA, 1916 AND 1917

	19	16	19:	17
Product	Quantity	Value	Quantity	Value
Gold (ozs.)	82	\$ 1,695		\$
Coal (tons)	4,559,054	11,386,577	4,736,368	14,153,685
Natural Gas (M. cu. ft)	6,904,231	1,113,296	6,744,130	1,299,976
Petroleum (bbls.)		[8,500	63,302
Cement (bbls.)	275,727	477,832	259,423	567,969
Clay Products		255,140	Í	309,991
Lime (bus.)	78,019	20,033	104,540	35,516
Sand-line Brick (No.)	697,500	5,571	1,547,590	15,703
Stone		257		7,482
*Other Products		67,142		73,911
Total Value		\$13,297,543		\$ 16,527,535

^{*}Includes in 1917 a small value in copper, zinc and silver in addition to sand and gravel.

ACCIDENTS.

Summary table showing Accidents occurring in Mines during 1906 to 1918 inclusive:

Year	Output	Accidents		Tons of Coal Mined Per Accident;				
	Output	Fatal	Serious	Slight	Fata1	Serious	Slight	
1906	1,385,000	10	11	20	138,500	125,909	69,250	
1907	1,834,745	19	18	18	96,565	101,930	26,981	
1908	1,845,000	11	38	13	167,727	48,552	141,923	
1909	2,174,329	9	42	18	241,952	51,769	120,796	
1910	3,036,757	61*	41	58	49,782	71.067	52,375	
1911	1,694,564	7	32	45	242,080	52,955	37,656	
1912	3,446,349	21	38	58	164,111	90,693	59,419	
1913	4,306,346	28	60	83	152,789	71,772	51,883	
1914	3,821,729	209**	44	50	18,286	86,857	76,434	
1915	3,434,891	18	33	33	190,827	104,087	104,087	
1916	4,648,604	20	51	34	232,430	91,149	136,723	
1917	4,863,414	24	62	39	202,642	78,442	124,703	
191 8	6,148,620	22	60	77	279,483	102,477	79,860	
Total	42,640,358	1 459	530	596	92,811	80,453	71,544	

*Including thirty-one deaths caused by the Bellevue explosion.
**Including one hundred and eighty-nine deaths caused by the

Hillcrest explosion.

Table showing Accidents during 1918 classified according to the coal field in which they occurred:

	Output		Accidents	3	Tons of Co	al Mined Per	Accident
	~	Fatal	Serious	Slight	Fata1	Serious	Slight
Domestic Bituminous _ Anthracite	3,035,061 2,982,334 131,225	5 17	26 34	39 38 	607,012 175,431	124,425 87,716	77,822 78,482

Classification of accidents according to outputs of mines which produced during the year 1918:

	Under 10.000 tons	From 10,000 to 50,000 tons	From 50,000 to 100,000 tons	From 100,000 to 200,000 tons	From 200.000 to 300.000 tons	From 300,000 to 400,000 tons	From 400.000 to 500,000 tons	Total
Fatal Serious Slight	$\begin{array}{c} 1 \\ 2 \\ 3 \end{array}$	3 11 19	5 11 17	6 9 11	4 14 17	8 7	3 5 3	22 60 77

Table showing accidents per ton of coal extracted from mines which produced during 1918:

-	Under 10,000 tons	From 10.000 to 50.000 tons	From 50,000 to 100,000 tons	From 100.000 to 200.000 tous	From 200.000 to 300,000 tons	From 300,000 to 400.000 tons	From 400,000 to 500,000 tons
Fatal Serious Slight	$egin{array}{c} 223,233 \ 111,616 \ 74,411 \ \end{array}$	$egin{array}{c} 261,271 \\ 71,256 \\ 41,253 \\ \hline \end{array}$	222,994 101,361 65,587	189,118 126,078 103,155	265,914 96,952	131,422	144,954 86,972
Total	37,205	23,752	33,787	43,642	79,842 38,781	$\begin{array}{ c c c }\hline 150,197\\\hline 70,092\\\hline\end{array}$	144,954 39,533

The following tables show the number of tons produced per accident:

DOMESTIC COAL MINES.

Pincher Creek Lethbridge Magrath Milk River Taber Bow Island Medicine Hat Aldersyde High River Drumheller Big Valley Brooks Hanna Lacombe Trochu Three Hills Carbon Battle River	3,955 857,092 1,627 6,848 183,485 7,283 19,028 8,069 570 881,081 34,718 9,783 29,533 15,201 18,248 30,150 5,431	No of Men Men Rmpl'd 14 1,429 3 359 20 36 19 18 53 1,451 49 18 53 35 39 39	Pata1	171,418	91,747 7,283 19,028 	53,568
Lethbridge Magrath Milk River Taber Bow Island Medicine Hat Aldersyde High River Drumheller Big Valley Brooks Hanna Lacombe Trochu Three Hills Carbon Battle River	857,092 1,627 6,48 183,485 7,283 19,028 8,069 881,081 34,718 9,783 29,533 15,201 18,248 30,150	1,429 3 33 359 20 36 19 3 1,451 49 18 53 35		145,180	91,747 7,283 19,028 	91,747 7,283 19,028
Lethbridge Magrath Milk River Taber Bow Island Medicine Hat Aldersyde High River Drumheller Big Valley Brooks Hanna Lacombe Trochu Three Hills Carbon Battle River	857,092 1,627 6,48 183,485 7,283 19,028 8,069 881,081 34,718 9,783 29,533 15,201 18,248 30,150	1,429 3 33 359 20 36 19 3 1,451 49 18 53 35		145,180	91,747 7,283 19,028 	91,747 7,283 19,028
Milk River Taber Bow Island Medicine Hat Aldersyde High River Drumheller Big Valley Brooks Hanna Lacombe Trochu Three Hills Carbon Battle River	1,627 6,848 183,485 7,283 19,028 8,069 570 881,081 34,718 9,783 29,533 15,201 18,248 30,150	3 33 359 20 36 19 3 1,451 49 18 53 35		145,180	91,747 7,283 19,028 	91,747 7,283 19,028
Milk River Taber Bow Island Medicine Hat Aldersyde High River Drumheller Big Valley Brooks Hanna Lacombe Trochu Trhee Hills Carbon Battle River	6,848 183,485 7,283 19,028 8,069 570 881,081 34,718 9,783 29,533 15,201 18,248 30,150	33 359 20 36 19 3 1,451 49 18 53 35	[145,180	91,747 7,283 19,028 	7,283 19,028
Taber Bow Island	183,485 7,283 19,028 8,069 570 881,081 34,718 9,783 29,533 15,201 18,248 30,150	359 20 36 19 3 1,451 49 18 53 35	[145,180	7,283 19,028 62,934	7,283 19,028
Bow Island	7,283 19,028 8,069 570 881,081 34,718 9,783 29,533 15,201 18,248 30,150	20 36 19 3 1,451 49 18 53 35	[145,180	7,283 19,028 62,934	7,283 19,028
Medicine Hat Aldersyde High River Broks Brooks Hanna Lacombe Trochu Three Hills Battle River Battle River	19,028 8,069 570 881,081 34,718 9,783 29,533 15,201 18,248 30,150	36 19 3 1,451 49 18 53 35	[145,180	19,028 62,934	19,028
Aldersyde High River Drumheller Big Valley Brooks Hanna Lacombe Trochu Three Hills Carbon Battle River	8,069 570 881,081 34,718 9,783 29,533 15,201 18,248 30,150	19 3 1,451 49 18 53 35	[145,180	62,934	
High River Drumheller Big Valley Brooks Hanna Lacombe Trochu Three Hills Carbon Battle River	570 881,081 34,718 9,783 29,533 15,201 18,248 30,150	3 1,451 49 18 53 35	[145,180	62,934	44,054
Drumheller Big Valley Brooks Lacombe Trochu Three Hills Carbon Battle River	881,081 34,718 9,783 29,533 15,201 18,248 30,150	1,451 49 18 53 35	[44,054
Big Valley Brooks Lacombe Trochu Three Hills Larbon Battle River	34,718 9,783 29,533 15,201 18,248 30,150	49 18 53 35	[44,004
Brooks Hanna Lacombe Trochu Three Hills Carbon Battle River	9,783 29,533 15,201 18,248 30,150	18 53 35				
Hanna Lacombe Trochu Three Hills Carbon Battle River	29,533 15,201 18,248 30,150	53 35			1	
Lacombe Trochu Three Hills Carbon Battle River	15,201 18,248 30,150	35		90 599		00 500
Trochu Three Hills Carbon Battle River	18,248 30,150		II .	29,533	15 001	29,533
Three Hills Carbon Battle River	30,150	39	[]		15,201	15,201
Carbon Battle River	- /		[
Battle River	5.431	54		30,150	30,150	15,075
		16			5,431	5,431
	12,203	20				
Camrose	56,597	85		56,597		56,597
Tofield	66,054	. 76				
Clover Bar	264,868	396		- ,	88,289	33,108
Edmonton	106,756	208		58,378	31,351	15,251
Namao	21,660	39	[[10,830	21,660	7,220
Cardiff	266,142	277	133,071	133,071	266,142	53,228
Wabamun	19,250	39	[[[
Pembina	109,429	125		109,429		109,429
Peace River		[[[
Total 3	3,035,061	4,896	607,012	116,733	77,822	43,358
		<u> </u>			1	
	BITUM	INOUS C	OAL MIN	ES.		
Crow's Nest Pass1	.601,486	1,799	228,784	160,148	177,943	61,595
Canmore	274,709	312	274,709	30,523	19,622	11,446
Brazeau	371,562	429		61,927	371,562	53,080
Jasper Park	283,342	487	56,668	141,671	283,342	35,418
Yellowhead Pass	195.972	314	97,986	32,662	16.331	9,799
Mountain Park	255,263	295	127,631	255,263	255,263	63,815
Total2	2,982,334	3,636	 175,431	87,712	78,482	33,509
	ANTHI	RACITE (COAL MIN	ES.	1	
Banff	131,225					

LIST OF ACCIDENTS WHICH HAVE OCCURRED IN THE DOMESTIC FIELD DURING 1918.

ДАТЕ	MINE	МАЖЕ	AGE	OCCUPATION	Details
Јап.	Cardiff Collieries, Ltd.	George Cook	29	Pumpman	He was pushing the centre car of a trip of three cars and was crushed
Jan.	4 Canadian Pacific Rallway Co., No. 6 Mine, Lethbridge	St. Wolosezuk	23	Coal-loader	between the coal rib and side of car. Injury to pelvis and bladder, from which he died on Jan. 5, 1918. He was going home from work and was riding on a trin of loaded ovel
					cars on the railroad from No. 6 mine and jumped off the train while it was in motion, falling with his left arm under the loaded cars, hadly crissing the arm which had
Jan.	5 Canadian Pacific Railway Co., No. 6 Mine, Lethbridge	John Chumik	46	Night-cager	to be amputated above the elbow. He was on the cage which was hoisted from surface landing to the
Jan.	7 Twin City Coal Co., Ltd.	E, Halbach	29	Machine-runner	tipple and struck his head against the side of the cage. Bruised about chest and scalp wound. He was operating a coal cutting machine when a piece of rock fell.
Jan.	8 The Western Commercial Co., Ltd	Steve Glavis	က	Miner	from the roof striking him on the leg. Fractured right leg. He was taking down cap-rock when a nigger-head which was in the roof
Jan. 1	11 Redcliff Brick & Coal Co., Ltd.	Alfred Womersley	35	Miner	fell on him scratching and bruising him on breast and legs. He was loading a car when a piece of cap rock fell from the roof striking
					him on the left shoulder, side and ankle. Badly bruised shoulder, side and ankle.

THE MINES BRANCH

		nch pai ine and as not h his 1 laving of slack 1ecessita	de went de went of back to got back un the right n back	powder ands.	om a	ne wher the mac and bety tree fin necess d finge
	Details	ering lu this m; He w ind with ished, h ig gear (on each si presumed to left side d gone bad fore he got e shot on Cuts on	fell in ge and ha	coal fr 1 face ar	s machin lowing t f. his ha f. rail, tl smashed, of thir
	Ď	e had been delivering lunch pails to men working at this mine and had been sent home. He was not seen again until found with his right hand badly crushed, having been caught in driving gear of slack con- veyor. Hand crushed, necessitating amputation of four fingers.	e had lit a shot on each side of his room and it is presumed the squib in the one on the left side went out and that he had gone back to relight-it, and before he got back to the crosscut the shot on the right side exploded. Cuts on back of neck.	park from light fell in powd burnt about face and hands.	ruck by flying coal from a shot, scalp wounds on face and head and	bruises on body. as jacking up his machine when the jack slipped, allowing the machine to fall, catching his hand between the machine and rail, three fingers on right hand smashed, necessitating amputation of third finger at first joint.
		He had been delivering lunch pails to men working at this mine and had been sent home. He was not seen again until found with his right hand badly crushed, having been caught in driving gear of slack conveyor. Hand crushed, necessitating amputation of four fingers.	He had lit a shot on each side of his room and it is presumed the squib in the one on the left side went out and that he had gone back to relight it, and before he got back to light it, and before he got back to side exploded. Cuts on back of neck.	Spark from light fell in powder car, burnt about face and hands.	Struck by flying coal from a shot, scalp wounds on face and head and	Druises on bouy. Was jacking up his machine when the jack slipped, allowing the machine to fall, catching, his hand between the machine and rail, three fingers on right hand smashed, necessitating amputation of third finger at first joint.
d.	z					
ontinue	OCCUPATION	Not employed				Machine-runner
LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.		Not er	Loader	Loader	Miner	Machin
sric F	AGE	∞ 	30	1	35	31
т Dомея	8	dderton	ch	-		8
ENTS IN	NAME	Freddy Chadderton	Chris Lokitch	Otto Grouch	Fred Lind	Jacob Luoma
Accm		Fre	Chr	Otto	Fre	Jacc
LIST OF						
	·		Ltd			
	Mine	o., Ltd.	oal Co.,	,	o., Ltd.	s, Ltd.
		Coal C	West Co	g Barr	Coal C	Jollierie
		12 Sterling Coal Co., Ltd.	16 Canada West Coal Co., Lt	16 Guthro & Barr	22 The Ellis Coal Co., Ltd.	26 Cardiff Collieries, Ltd.
	DATE		100			
	Ď,	Jan.	Jan.	Jan.	Jan.	Jan.

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

DATE	Mine	NAME	AGE	Осспратиом	Details	
	28 Canadian Pacific Railway Co., No. 6 Mine, Lethbridge	Albert Binda	42	Rollerman	He was attempting to couple a moving trip of empty cars to an empty car that was standing on the curve of No. 4 northwest face entry, when the cars bumper locked and derailed one which struck him on the leg, breaking his leg.	AMM
	2 The Ellis Coal Co., Ltd	Peter Misenacrick	24	Machine Helper	He had just entered the mine, and had put his tools down and was turning around when his eye came in contact with an auger in the hands of a fellow workman, resulting in injuries to the eye so that it	ALL TABLORS
_ <u>~~</u>	8 Canadian Pacific Railway Co., No. 6 Mine. Lethbridge	Fred Kosyelek	35	Coal-loader	had to removed. He was working in the last cross-cut off No. 6 face entry southwest when a piece of coal fell from the rib striking him on the leg. Bad cut	,
_ 	Feb. 21 Canadian Pacific Railway Co., No. 6 Mine Lethbridge	James C. Barclay	37	Tipple foreman	on right leg. He slipped and fell between two empty cars, which were returning from the kickback to the cage, crushing him. Fractured collar bone and busises to chest	
<u>≅</u>	 McPeak Coal Co	Guss Frederick	31	Pusher	Jammed between the roof and a load- ed car. Cut on head and bruised about the chest.	
− ≅ −	Mar. 23 Knee Hill Coal Company	Karl Hedbery	35	Miner	A lump of clay rolled on him, dis- locating his shoulder.	

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

DATE	MINE	NAME	AGE	Occupation	Details
April	8 McPeak Coal Co	Steve Denytry	28	Miner	A piece of clay fell from the roof on to his back, injuring it.
April 4	April 20 Canadian Facilic Rallway, No. 5 Mille, Deul-bridge	A. Campbell	31 49	Timberman Timberman	They were engaged in repairing a pipe in a borehole from the surface, and had been working two and a
				-	half hours when some gas was ignited at their open lights. Campbell was slightly burned on ears and nose, Moore burned on hands and neck.
April 2	April 26 Alberta Coal Mining Co., Ltd	Andrew Denysiuk	34	Miner	He had ignited the fuse to fire two shots and had returned to the face before the second shot exploded, with the result that he was struck by flying coal. Death occurred on the morning of the 27th April from
April 2	April 27 Union Collieries, Ltd	John Dymnisky	24	Driver	shock and injuries received. He was found lying unconscious on the track in No. 6 entry, bleeding from a wound in his left thigh. He died half an hour after being found.
May 1	16 Drumheller Land Co., Ltd	Mike Musat	88	Driver	Death was caused by concussion of the brain and loss of blood. He was bringing out a loaded trip when the first car jumped the track, jamming his left foot between the rail and car bumper. Lacerated foot.

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

DATE	Mine	NAME	AGE	OCCUPATION	Details
May 27	27/The Western Commercial Co., Ltd.	Joseph Salva	54	Tracklayer	He was carrying a heavy rail when he slipped and fell, straining his back.
June 4	4 Rose-Deer Coal Mining Co., Ltd	Steve Rogich	53	Miner	He was working in a pillar when a piece of rock fell from the roof, striking his back. Bruised back and internal injuries.
June 11	11 Scranton Coal Mining Co., Ltd.	T. Wychanko	29	Miner	He was putting up timber when the roof fell on his ankle, dislocating it.
June 1	June 18 Peerloss Coal Co., Ltd	Stephen Carp	. 82	Miner	He had fired two shots and after hearing two reports he returned to the face of the room, when the second shot exploded and he was struck by flying coal. Cut over left eye and on side of head.
June 24	June 24 Rosedale Coal & Clay Product Co., Ltd P. Mikerlin	P. Mikerlin	34	Miner	He was replacing a set of timber that had been blown out by a shot when a piece of rock fell from the roof, striking him on the back. Internal
June 20	June 26 The Great West Coal Co., Ltd	J. Cherewatin	32	Miner	He was letting a car down the new slope, when the empty car was near the McGinty wheel he slipped and
July 1	July 10 Regal Collieries, Ltd	George Lupool	35	Driver	

64			Тн		Branch		
er i de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la c	Details	He was helping machine runner to load up the machine after finishing a cut when a nigger head fell off the rib onto his leg, breaking the leg above the knee.	-Fall of cap rock from roof at face of	Kane was kindling the fires under the bollers and in transferring a shovelful of burning coal from boller room to hoist room some of it fell from the shovel on the	floor, starting a fire which rapidly spread through the entire building. Burns on hands and arms. He was in the act of closing a mine car door and got his finger caught between the car and the door.	Crushed finger. A car got off track, the injured man started to put car back on track without uncoupling horse from trip, horse started un throwing man un-	derneath the car. Compound fracture of left leg between knee and hip. He was chopping a boom with an axe which slipped and cut him on the back of left hand.
3LD—Continued.	Occupation	Machine-Scraper	Miner	Engineer	Tippleman	Driver	Coal loader
ic Fir	AGE	. 22	37	29	45 	37	88
LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.	NAME	T. A. Macauley	J. Stewart	Norman Kane	Thomas Crawford	G. Cobald	., C. Leoni
List of A	MINE	July 11 The Great West Coal Co., Ltd.	17 The Western Commercial Co., Ltd	3 Hamilton Coal Co., Ltd	5 The Western Commercial Co., Ltd	7 North American Collieries, Ltd	4 Canadian Pacific Railway Co., Mine No. 6, Lethbridge
	Date	July 1	July 1	Aug.	Aug.	Aug.	Aug.

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

DATE	Mine	NAME	AGE	Осспратіом	Details
Aug. 1	Aug. 11 Cardiff Collieries, Ltd.	John Braban	42	Blacksmith	While punching holes in plate a piece of the face of the hammer flew off
Aug. 1	14 The Western Commercial Co., Ltd	Harry Jones	17	Mine laborer	hitting him in the eye. He was throwing a piece of coal in a car and caught his hand between
Aug. 2	20 Cardiff Collieries, Ltd.	Charles W. Borttoff	39	Hoist Engineer	the car and coal. Cut hand. He was installing screens in the tipple and caught his fingers be-
Aug. 2	21 The Western Commercial Co., Ltd	Oscar Goose	17	Driver	
Aug. 2	24 McPeak Coal Co.	Edward Spinks	34	Driver	He was coupling cars when his horse started, jamming him between cars
Ang. 2	Ang. 26 Union Collieries, Ltd.	Thomas Kozma	46	Loader	and timber. Bruised back and left arm. He was pushing an empty car and
Aug. 2	Co., Mine No.	Fred Smith	ស	Slate nicker	caught his foot in the frog of switch, of the car ran back onto his foot. Sprained right foot. He was crawling under the shaffing
Sept. 1	Sept. 19 Hamilton Coal Co., Ltd.	W. H. Huska	2 2	Driver	that drives the coal feeder when his belt caught in the shaft coupling. Squeezed around abdomen. While riding on empty cars, a car
Sept. 1	Ltd	Nick Poleuski	. 89	ie-runner	jumped the track crushing him be- tween the car and a prop. Bruised hip. A piece of rock fell from the roof. Bruised back, right arm and left leg.

	LIST OF	LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.	лс Fn	ELD—Continued.		66
DATE	E MINE	NAME	AGE	Occupation	DETAILS	
Sept.	Sept. 23 Humberstone Coal Co., Ltd.	Frank Wagner	37	Machine-runner	Piece of rock fell from roof hitting him on the leg at ankle. Cut on ankle.	
Sept.	28 The Bush Mine Coal Co	F. Riedel	28	Miner		
Oct.	4 Sturgeon Consolidated Collieries, Ltd	A. Polsat	28	Pusher	when the powder ignited from the flame of his cap lamp, burning him about the face and eyes. He was crossing the cage seat at the shaft bottom when the case country.	Тне Мі
Oct.	7 Humberstone Coal Co., Ltd	Cecil Dawson	20	Rope-rider		NES
				·	the surface that he was coming up on the skip, and had stepped into the skip and thinking the engineer had not heard the signal started to get out and had one leg over the side of skip when the engineer started hoisting. He had his leg	Branch
0ct.	15 John Keehn	Alexander Krisby	 rc	Miner	badly scraped. He was mishing an empty mine car	
į	16 Keith & Fulton		6 4	Overmen	when he fell, striking his knee, splitting the kneecap. Ho was caught hetween a moving	
Oct.	21 Twin City Coal Co. Ltd.	William Foster	68	Overman	caught between a la prop. Fractured cting as rone-rider a	
-					ed to detach the clip connecting the rope to the cars and got caught between two cars. Fractured left thich and hunsed foot	
•						eu to uetach the cup connecting the rope to the cars and got caught between two cars. Fractured left thigh and bruised foot.

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	Mine	NAME	AGE	OCCUPATION	DETAILS
Edmonto		Mike Kosikreweg	1 54	Miner	He was lifting a car on the track when his fingers got caught between the car and rail, cutting the end off the first finger and crushing the other three (left hand).
North An heller)	24 North American Collieries, Ltd. (Drum- heller)	M. Edwards	35	Miner	He was putting up a set of timber X when the roof caved falling on him. Z Injured internally.
Twin Ci	26 Twin City Coal Co., Ltd.	. William Sandyisk	19	Driver	He was bringing out a trip of full cars and bumped into a full car which had become uncoupled from the trip ahead of him. Bruised hip and injured pelvis.
McPeak	26 McPeak Coal Co	Edward Shultz	46	Miner	He was digging coal from the face when a piece fell on to his leg. Bruised leg.
27 Peter Jones	ones	Allan R. McDonald	98	Not employed	He was standing watching a trip being lowered when the brake strap on the gin broke allowing the drum to travel at a high speed, and a piece of pipe attached to the drum was thrown off catching him on the side of the head, killing him instant.
Federal	Federal Coals, Ltd.	Thos. Halaburda	29	Miner	Fall. Fall of coal at face of room resulting in fractured left leg and internal injuries. Fatal.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
7.	Nov. 27 Round Hill Collieries, Ltd	Auton Yurkoski	. e. 70	Weighman	The R.R. locomotive was placing empty cars and this man went to move the loading apron when the cars struck the apron crushing him between it and the tipple, breaking one leg below the knee and crushing both legs.
	Nov. 29 Canadian Pacific Railway Co., No. 6 Mine Peter	Peter Horhozer	47	Loader	While working at the face a piece of rock fell on his back causing severe bruising of back.
Dec.	4 Canadian Pacific Railway Co., No. 6 Mine	6 Mine George Miskaleive	56	Driver	The horse he was driving became frightened and pulled an empty car
Dec.	5 The Ben Nevis Mines, Ltd.	John McGladrie	37	Miner	t t
Dec.	11 North American Collieries, Ltd., Evans- burg	Kenneth Laws	33	Switcher	struck him on the back. Bruised back and ribs. While taking block from under carrents.
Dec.	12 Sturgeon Consolidated Collieries, Ltd., No. 2 Shaft	William Haas	34	Miner	wheet he total the motorinan to back with the result that the wheel passed over his left hand badly crushing the middle fingers. He was being lowered down the shaft on the skip when the brake on the alipped allowing the skip to strike the bottom too heavily.

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LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

The state of the s		He was being lowered down the shaft on the skip when the brake on the drum slipped allowing the skip to strike the bottom too heavily. Fracture of the fifth lumbar vertebra.	He was loading out coal from the center shot when the side of coal fell on him, breaking his left leg between the knee and ankle.
	OCCUPATION.	Miner	Loader
	AGE	25	25
	NAME.	c. David Osterson	Austin Wills
	Mine.	Dec. 12 Sturgeon Consolidated Collieries, Ltd., Nc. 2 Shaft	Dec. 12 North American Collieries, Ltd., Coalhurst Austin Wills
	DATE	Dec. 12	Dec. 12

THE MINES BRANCH

70	i.	1	,,4	1	TH			BRAN			8 m m :
DURING 1918.	DETAILS	Leg crushed between cars on tipple.	Fall of top coal in pillar. Cut on hea i	and right leg injured. He was mining out a stump of coal	in a pillar when coal and cap rock fell on him, breaking his right leg. The car on which he was riding jump-ed the track, crushing him between	car and timber. Crushed about hips. Caught by loaded cars on No. 1 slope.	Fatal. Slipped off platform at face of angle	while boring a hole in the top coal. Scalp wound. He was walking along the gangway	carrying his lamp with his hand on top of the bonnet when a piece of rock fell from the roof striking him on the hand, cutting the second finger of his right hand, necessitating amountation of the finger at the first	joint. Fall of coal from corner of pillar.	Fatal. He was starting the coal in No. 92 chute and must have slipped and fallen into the chute and was buried by the coal which suffocated him. Fatal.
IE BITUMINOUS FIELE	Occupation	Car coupler	Miner	Miner	Driver	Car handler	Miner	Miner		Miner	Miner
IN TE	AGE	36	33	48	23	25	78	34		36	49
ACCIDENTS WHICH HAVE OCCURRED IN THE BITUMINOUS FIELD DURING 1918.	NAME	Louis Fidenato	J. Lipnioka	P. King	E. Fondrick	Samuel Edwards	John Amado	John Reinnikka		Samuel Parker	Joseph Beranek
LIST OF ACCIDENTS WE	Mine	4 Hillcrest Collieries, Ltd	4 West Canadian Collieries, Ltd., Bellevue J. Lipnioka	4 Brazeau Collieries, Ltd.	9 Blue Diamond Coal Co., Ltd.	22 Hillcrest Collieries, Ltd.	23 Oliphant-Munson Collieries, Ltd	24 Canmore Coal Co., Ltd.		 West Canadian Collieries, Ltd., Bellevue _	9 Franco-Canadian Collieries, Ltd
	DATE	Jan. 4	Jan. 4	Jan. 4	Jan. 9	Jan. 22	Jan. 23	Jan. 24		Feb.	Feb.

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

			-			
DATE	MINE	NAME	AGE	Occupation	Details	
Mar.	5 North American Collieries, Ltd., Lovettville	Ltd , Lovettville Walter Tauchuk	27	Driver	He was spragging the mine cars when the horse started away jamming him between the car and side of roadway. Broken pelvis bone.	
Mar. 1	Mar. 14 Hillcrest Collieries, Ltd	William Kuleski	34	Miner	A boom fell from the roof in an old room striking him on the right leg, breaking it above the ankle.	Annu
April	April 3 Franco-Canadian Collieries, Ltd	Frank Pokorney	38	Miner	Burned on head and hands. Explosion of gas, same being ignited by	jal R
April	April 4 Canmore Coal Co., Ltd.	G. Forcheim	30	Miner's helper	from the roof	EPOR
April	April 4 Saunders Creek Domestic & Steam Coal	Alexander Coutent	30	Driver		г, 191
April 1	April 11 Saunders Creek Domestic & Steam Coal	J. Jacquart	35	Miner	way, s. ator.	Lδ
April 1	April 12 Blue Diamond Coal Co., Ltd	T. Davis	53	Miner	Loss of thumb and two fingers. Bruised hip. Missed his footing coming down from angle to counter en-	
April 1:	April 15 International Coal & Coke Co., Ltd.	Antonio Cemetta	39	Miner	try and fell down into the raise. Left arm broken below elbow. Fall of an face of room.	
April 1	April 15/Jasper Park Collieries, Ltd	Frank Lombardo	48	Miner	He was preparing a place to set a prop when a piece of rock fell from	
						4 L

THE MINES BRANCH

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

Occupation Details	acting as He	Fe		laborer He was pushing coal down a ctute in No 1 slope when a piece of coal rolled over the check board, striking him on the left leg, breaking it
	20 Motorman Driverbo	48 Examiner	<u> </u>	Miner Miner Miner Miner Miner Mine Mine
AGE	~			10 10 00 00
NAME	Daniel McLeod	W. Fisher	Karl Krauze Walter Landon Wm. Oliphant (Jr.) John Daguile Joe Szotkouski W. H. Martin W. H. Martin Steve Romaunk Bill Romaunk M. Billuski Andrew Kostuk	K. Frud A. Urban Joe Pawlshyn Mike Hibchuk
Mine	April 19 Jasper Park Collieries, Ltd	West Canadian Collieries, Ltd., Bellevue	May 14 Outphant-munson Conteries, Let.	17 McGillivray, Creek Coal & Coke Co., Ltd
DATE	April 19 J	May 4 V	May 14	May 17 N

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

DATE	Mine	NAME	AGE	Occupation	DETAILS	
May 2	21 McGillivray Creek Coal & Coke Co., Ltd	Coke Co., Ltd Ferdinand Thiery	22	Miner	He was digging the bench coal when a large piece of rock fell from the	
					roof, severely crushing his back and	
May 2	25 West Canadian Collieries, Ltd., Bellevue	William Randall	16	Outside laborer	Team ran away and he was thrown	
					leg	
May 3	30 West Canadian Collieries, Ltd., Bellevue P. McLafferty	P. McLafferty	30	Miner	s in-	
June	1 Blue Diamond Coal Co., Ltd.	John Kulba	24	Driver	juries to back, chest and head. He was breaking a new horse to work, P	UAI
June	4 International Coal & Coire Co. 1.48	Thomas Mourian	Ş			KE
		Tuomas munitam	C ‡	winer		PORT
June	5 Franco-Canadian Collieries, Ltd.	Robert Rarnhill	r e	To riv	•	, I
			3	TOTAL TOTAL		918
June 1	June 12 Cadomin Coal Co., Ltd.	Philip Sharamata	22	Miner .	the cars. He was repairing timber in No. 27	
		•			angle near counter level, when a fail of coal took place burying him and	
June 1	June 13 Blue Diamond Coal Co., Ltd.	Daniel McLean	32	Miner	suffocating him. Fatal. He was repairing timber, when a fall	
					of coal took place, burying him, crushing him so that he died before heing taken out from the cave	
June 1	June 15 Canmore Coal Co., Ltd.	Ng Hoy (Chinese)	25	Laborer	ute	
					chute, striking him on the head.	3

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DATE	MINE	NAME	AGE	Occupation	DETAILS
June 25	22 West Canadian Collieries, Ltd., Greenhill Fred Lund	Fred Lund	30	Miner	Fall of coal at face of room, dislocat-
June 28	28 West Canadian Collieries, Ltd., Bellevue G. Moro	G. Moro	36	Mechanic's helper	ed int. He was blasting rock and had tamped and fired two shots, the second shot
į	Tuly 17 West Canadian Collieries Ltd. Bellevue Walter Warn	Walter Warn	38	Outside foreman	did not explode until he got back when it went off, blowing four fingers off his right hand. He was cutting the side-noles on a
i i					railway car when the pole gave way allowing the lumber to fall on him dislocating his hip and breaking his
July 16	July 19 Cadomin Coal Co., Ltd.	G. Lee	42	Outside laborer	leg. He was rolling logs, one of which rolled back onto his log brooking it
July 27	July 27 West Canadian Collieries, Ltd., Bellevue J. Porwitt	J. Porwitt	26	• Brakeman	below the knee (left leg). Head jammed between cars when in
					the act of coupling cars when in motion. Crushed head. He died from the effects of injury on July
July 3	July 31 Blue Diamond Coal Co., Ltd.	E. V. Fisher	37	Miner	30th. He was drawing a pillar when the
Aug. 2	2 Canmore Coal Co., Ltd.	Nick Drapaka	59	Slope cager	coal fall and the was caught by the coal and buried. Suffocated. Fatal. He was coupling cars when the cars bumped and caught his arm. Bruis-
Aug. 3	3 Canmore Coal Co., Ltd.	Mike Coleyak	35	Miner	ed right forearm. A piece of rock fell from the roof cut-
Aug.	6 Canmore Coal Co., Ltd	Joseph Kanik	36	Rope rider	His leg was caught between the bump- or of two cars. Fracture of right
		_	_		ieg above the ankle.

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

DATE	MINE	NAME	AGE	Оссиратюм	DETAILS
Aug.	6 Brazeau Collieries, Ltd	K. Haratychuk	64 44	Miner	The injured person was lowering a loaded car down slant, with a hemp rope, got his foot caught in loose coil of rope which was pulled against the snubbing post. Fracture of right leg.
Aug. 1	Aug. 14 Canmore Coal Co., Ltd	John T. Musgrove	48	Overman	He was at the sinking pump near foot of the slope when an empty car was pushed over the knuckle without being attached to the rope. The car struck him, fracturing his skull and left leg, from the effects of
Aug. 1	Aug. 14 West Canadian Collieries, Ltd., Bellevue - C. Matousk	C. Matousk	21	Bucker	which he died. Bucking coal in chute when piece of coal struck him on the head. Cuks
Aug. 1	Aug. 16 International Coal & Coke Co., Ltd Josef Klis	Josef Klis	32	Miner	on face and scalp. Piece of high side coal and timber teg fell striking him on the back,
Aug. 1	Aug. 19 Brazeau Collieries, LtdA	A. Storosbchuk	38	Miner	throwing him under a loaded stationary car. Broken neck. Fatal. He was lowering a loaded car by means of a McGinty and did not apply the brake when the car got out
Aug. 2	Aug. 22 Canmore Coal Co., Ltd	Alec Chalifey	21	Rope rider	of control, with the result that the empty struck him. Left cheek bone, lower jaw and right leg fractured. It was caught between a loaded car and prop. Bruised on left thigh and abdomen.

LIST OF ACCIDENTS IN BITUMINOUS FIELD-Continued.

DATE	Mine	NAME	AGE	Occupation	Detalls
Aug. 2	Aug. 29 Canmore Coal Co., Ltd.	Robert Wade	34	Miner	He was moving a piece of rock when another piece rolled down, striking
Sept.	3 Hillcrest Collieries, Ltd.	Joe Royle	16	Car handler	him on the finger. Bruised and lac- erated little finger, left hand. Foot caught between loaded cars when his horse rea eary Braised
Sept. 1		H. M. Williams	45	Clerk	of tipple. Fra
Sept. 1	Osaunders Creek Domestic & Steam Coa.	C. S. Thornton	26	Driver	left forearm. Got his foot caught under car bumper when jumning off car at timela
Sept. 1	Sept. 12 Canmore Coal Co., Ltd.	Hans Sar	22	Miner	fell on his foot.
Sept. 1	Sept. 13 Canmore Coal Co., Ltd.	Dym Ewashuk	22	Rope-rider	ed 11ght 1990. He was uncoupling cars when horses et was un ond his finner was inm
Sept. 1	Sept. 16 West Canadian Collieries, Ltd., Bellevue Joseph Newton	Joseph Newton	17	Bucker	scarced up and his tinger was jain- med. Lacerated first finger, left hand. He was riding on the back end of air motor hauling trucks when the first
Sept. 2	Sept. 28 Canmore Coal Co., Ltd	Fred Bukoway	40	Miner	truck jumped the track, knocking out a post which struck him on the head. Fatal. Piece of rock fell from the roof, strik-
Oċt.	2) Canmore Coal Co., Ltd.	Vernon Pearson	29	Ass't Master Mechanic	Ass't Master Mechanic Was kicked on the leg by a horse
Oct.	3 Canmore Coal Co., Ltd.	Sam Ewashuk	82	Driver .	working on the upple. Brussed leg The horse he was driving stepped on his foot and knocked him down, in- juring him on his knee and abdo- men.

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

		ANI		tero.	кт, тэ	.10			
DETAILS	He was taking a car out from his working place when he got caught between the car and a prop. Brussed left side and one rib broken.	He was inserting the detonator into a stick of powder when it exploded,	hand and injury to his face. A piece of coal fell from the roof. striking him on the shoulder. Free-	tured right shoulder blade and rib. A piece of rock rolled down from the bigh side of place crushing his lar	against a timber. He was preparing to place a set timber when a fall of coal and rock	took place, burying him. His part- ner was framing the timber at the time. Death was caused through shock.	He was carrying some boards into a crosscut and was knocked down by a passing empty car. Bruised ankle.	A piece of cap rock fell from the roof striking him on the head. Small	He was lighting a fire in the fan house stove, using gasoline. The gasoline exploded, throwing fire onto him. Severely burnt feet and left hand
Occupation	Miner	Miner	Miner	Miner	Miner		Bratticeman	Miner	Fanman
AGE	25	30	41	39	88		38	25	32
NAME	Wm. Kudafto	Angelo Evanoff	John Niemi	John Wnolle	- Dymitro Breczko		Geo. Drapka	Wm. Bohyczuk	M. Ghiringhelli
MINE	16 Canmore Coal Co., Ltd.	17 Oliphant-Munson Collierles, Ltd	19 Canmore Coal Co., Ltd	21 Canmore Coal Co., Ltd	30 Blue Diamond Coal Co., Ltd		8 Canmore Coal Co., Ltd.	9 Canmore Coal Co., Ltd	19 West Canadian Collieries, Ltd
DATE							Nov. 8	Nov. 9	Nov. 19
Il	Oct.	Oct.	Oct.	Oct.	Oct.		ž	ž	ž

LIST OF ACCIDENTS IN BITUMINOUS FIELD--Continued.

DATE	Mine	NAME	AGE	Occupation	DETAILS
Dec.	Dec. 10 McGillivray Creek Coal & Coke Co., Ltd	Coke Co., Ltd W. E. G. Hall	33	Assistant surveyor	He was climbing on a chute for the purpose of putting a spad in the
Dec. 1	Dec. 19 Canmore Coal Co., Ltd.	James Reid	 %	Examiner	roof when he slipped. Left leg broken between knee and ankle. A shot was fired by Reid in a large
		John Zboya	35.33	Miner	piece of rock, ignited some gas causing a slight explosion, resulting in
		John Niamchuk	23 8	Miner Bratticeman	Reid, Zboya, Reinnikka and Niam- chuk being burnt about the head,
					face and hands, and Nicaise being slightly burnt on face and hands.
					hroken
Dec.	Dec. 21 Cadomin Coal Co., Ltd.	John Luklan	29	Miner	He went into a crosscut off No. 48
					do so, as there was gas in it. He was asnhvxiated
Dec. 2	24 Mountain Park Coal Co., Ltd.	D. Greaci	25	Chute-loader	He was bucking coal down the chute
					when a cave occurred causing a rush of coal which knocked him
					down in the chute. Cut face, bruised back and neck.

FATAL ACCIDENTS.

The fatal accident which occurred to George Cook on January 1, 1918, at the mine operated by the Cardiff Collieries, Limited, near Cardiff, was caused through his being crushed between the coal rib and a full car. He was pushing the ceuter car of a trip of three cars, and got crushed as above, resulting in injury to the bladder and crushed pelvis, from the effects of which he died on January 5, 1918.

The fatal accident which occurred to Samuel Edwards on January 22, 1918, at the mine operated by the Hillcrest Collieries, Limited, Hillcrest, was caused through his being caught by a trip of runaway loaded cars on No. 1 slope. He apparently was walking up the slope behind the trip when the link between the first and second cars broke, letting three cars back down the slope, catching Edwards, death being instantaneous.

The fatal accident which occurred to Samuel Parker on February 8, 1918, at the mine operated by the West Canadian Collieries, Limited, Bellevue, was caused through a fall of coal from the corner of a pillar.

The fatal accident which occurred to Joseph Berauck on February 9, 1918, at the mine operated by the Franco-Canadian Collieries, Limited, Frank, was caused through his falling in the chute when starting the coal, and being buried by the coal, which suffocated him.

The fatal accident which occurred to Frank Lombardo on April 15, 1918, at the mine operated by the Jasper Park Collieries, Limited, Pocahontas, was caused through a fall of rock. He was preparing to set a prop when a piece of rock fell from the roof, striking him on the head and fracturing his skull, causing instant death.

The fatal accident which occurred to Daniel McLeod on April 19, 1918, was caused through his being caught between a trip of loaded mine cars and a door on the main entry. He got off the motor, which was pushing a trip of loaded cars out ahead of it, and went ahead to open the door, when in some manner he got caught as above, the door not having been opened, receiving injuries to the spinal cord and brain which proved fatal.

The fatal accident which occurred to Andrew Denysink on April 26, 1918, at the mine operated by the Alberta Coal Mining Company, Limited, Cardiff, was caused through his returning to his place before the second of two shots had exploded. He had ignited the fuse for two shots, and was returning to the face, when the second shot exploded, the flying coal from which struck him, causing injuries to the head and arms, from the effect of which he died on the morning of the 27th of April, 1918.

The fatal accident which occurred to John Dymnisky on April 27, 1918, at the mine operated by the Union Collieries, Limited, near Diamond City, was caused through his being injured in some manner not known. He was driving a horse, and was taking two loaded cars to the outside from a working place, when he was found

lying on the track, having received injuries in some unknown manner to his head and left leg, from which he died, death being due to loss of blood and concussion of the brain.

The fatal accident which occurred to John H. Browrigg and Karl Krauze on May 14, 1918, at the mine operated by the Oliphant-Munson Collieries, Limited, Oliphant Mines, was caused through an explosion of powder. A fire occurred in the time office building, a portion of which was used to store the daily supply of powder. The fire in this building had burned down and a fire had started in the blacksmith shop adjoining and attempts were being made to put out the fire in the blacksmith shop when the powder exploded, killing the above and injuring several others.

The fatal accident which occurred to Ferdinand Thiery on May 21, 1918, at the mine operated by the McGillivray Creek Coal and Coke Company, Limited, near Coleman, was caused through a fall of rock from the roof. He was digging the bench coal when a large piece of rock fell from the roof, crushing his back and left side, from the effect of which he died shortly after.

The fatal accident which occurred to Philip Sharamato on June 12, 1918, at the mine operated by the Cadomin Coal Company, Limited, at Cadomin, near Mile 22, on the Grand Trunk Pacific Coal Branch, was caused by a fall of coal. He was repairing an angle when a fall of roof coal took place, burying him and suffocating him.

The fatal accident which occurred to Daniel McLean on June 13, 1918, at the mine operated by the Blue Diamond Coal Company, Limited, Brule Mines, was caused through his being buried by a fall of coal. He was repairing the timber in a pillar, when a fall of coal took place, crushing him so that he died before being taken out.

The fatal accident which occurred to J. Porwitt on July 27, 1918, at the mine operated by the West Canadian Collieries, Limited, Bellevue, was caused by being jammed between loaded cars. He was coupling cars while in motion, and got his head crushed between the cars, receiving injuries from which he died on the 30th July, 1918.

The fatal accident which occurred to E. V. Fisher on July 31, 1918, at the mine operated by the Blue Diamond Coal Company, Limited Brule Mines, was caused by a fall of coal. He was drawing pillars, and had got in behind the battery to start the coal, when a rush of coal caught and buried him, death being due to suffocation.

The fatal accident which occurred to John T. Musgrove on August 14, 1918, at the mine operated by the Canmore Coal Company, Limited, Canmore, was caused by his being struck by a runaway empty car on the slope. He was at the sinking pump, near the foot of the slope, when an empty car which had been pushed over the knuckle at the top, becoming detached from the rope, ran down the slope, striking him, fracturing his skull and left leg, from the effects of which he died about one hour and a half later.

The fatal accident which occurred to Joseph Klis on August 16, 1918, at the mine operated by the International Coal & Coke Company, Limited, Coleman, was caused by a fall of coal. He and his partners were loading a car, having placed the legs for a set in position, when a piece of coal slipped off the high rib, knocking out the leg, which struck Klis, fracturing his skull, killing him instantly.

The fatal accident which occurred to Joseph Newton on September 16, 1918, in the mine operated by the West Canadian Collieries, Limited, Bellevue, was caused through his being struck on the head by a prop. It is presumed that he was riding on the back end of the compressed air locomotive when a timber truck got off the track, knocking out a post, which struck him on the head, from the effects of which he died shortly after being struck.

The fatal accident which occurred to Allan R. McDonald on October 27, 1918, at the mine operated by Peter Jones, near Diamond City, was caused through his being struck on the head by a piece of pipe. He was standing watching a loaded car being lowered down a surface incline, when the brake strap broke, allowing the drum to travel at a high speed, and a piece of pipe attached to the pulling arm broke loose and caught him on the side of his head, killing him instantly.

The fatal accident which occurred to Dymitro Breezko on October 30, 1918, at the mine operated by the Blue Diamond Coal Company, Limited, Brule Mines, was caused by a fall of coal and rock in pillar workings. He was preparing to place a set of timber when a fall of coal and rock took place, burying him. He was taken out within twenty minutes, but was dead, death being caused through shock.

The fatal accident which occurred to Thomas Halaburda on November 1, 1918, at the mine operated by the Federal Coal, Limited, near Lethbridge, was caused by a fall of coal. He was taking down draw slate at the face of his room, having loaded out part of the coal that was undercut, when a large piece of coal rolled out from the face of the room onto his leg, fracturing it and injuring him internally. He died about three hours after the accident from shock.

The fatal accident which occurred to John Luklan on December 21, in the mine operated by the Cadomin Coal Company, Limited, was caused through asphyxiation. He entered a crosscut, off the angle which he was driving, where an accumulation of gas had been fenced off. The examiner had previously warned him not to enter this crosscut.

On May 21, 1918, William Nikol died from the effects of an accident which occurred to him on October 31, 1917, in the mine operated by the Chinook Coal Company, Ltd., near Commerce, in which he had his leg broken.

This accident is not included in the number reported for 1918.

TABLE SHOWING ACCIDENTS AS THEY OCCURRED BY MONTHS DURING THE YEAR 1918

		Above	Ground	1		Below	Groun	d `	Total
Months .	Fatal	Serious	Slight	Tota1	Fatal	Serious	Slight	Total	Above and Below Ground
January February March April May June July September October November December	2	2 1 5 1 2 1 1 	2 -11 -11 1 -3 1 1 -1	4 1 1 18 2 2 4 2 2 2 2 1	2 2 1 1 2 2 2 1 1 1 1	6 1 2 2 2 5 1 4 	7 1 1 7 3 4 2 11 8 6 3 3	15 4 3 13 6 11 5 17 9 15 4	19 5 4 14 24 13 7 21 11 17 6 18
	3	16	21	40	19	44	56	119	159

Note—In the month of May there were two persons killed, four persons seriously injured, and eleven slightly injured by an explosion of powder in the mine office of the Oliphant-Munson Collieries, near Coalspur, caused by fire.

Tabulated list of Accidents occurring in the Province above and below ground during the year 1918:

Cause	Fa	ıtal	Sei	rious	Si	ght	To	otal
Cause	A	В	A	В	A	В	A	В
Haulage	1	7	2	17	1	14	4	38
Falls of rock			11	5		20	il	27
Falls of coal			[7	(3		. 17
Shaft accidents	-			. 2	1	2	1	4
Shot-firing		1	1	3		4	1	8
Ignition of gas			[]	. 5		4	İİ	. 9
Asphyxiation		1		.]]	_	ii	. 1
Falling in chute		1	[[[[l	İ!	1
Struck by coal in chute				. 1		2	ii	3
Fall of timber in room				. 1			li	. 1
Slipped while coming down angle						1		1
Electric coal-cutter				1		1 -		1
Tipple machinery			2	1	1		3	1 1
Struck by empty cars on	-		-					
tipple		1	1		1	ł	2	1
Struck by loaded cars on			1 -		1		1 -	
tipple		ľ	H	1 9	2	l	2	ì
Ignition of powder from fire			-		~		1 4	
at the office	2		4		11		17	
Unloading timber			2		1		2	
R. R. cars			2		-		2	-
Miscellaneous			2	2	4	6	6	8
	3	19	16	44	21	56	40	119

Tabulated List of Accidents occurring in the Province above and below ground during the year 1918, classified according to the Districts in which they occurred.

	Fatal	al	Ser	Serious	Sli	Slight	o.L	Total	Total above
Name of District	Above	Below	Above	Below	Above	Below	Above	Below	ground
Crow's Nest Pass			4	9	-	8	-CG	21	26
Pincher Creek	1		2	8	2	9	20	11	16
Milk River	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
Taber						67	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	67 +	67 +
Bow Island			1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1	- -		-	-
Aldersyde						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			-
High River		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1				6	66	9.4
Canmore	1 1 1 1 1 1 1 1 1 1	7		.	N	71	1	44	H 7
Drumheller			1	5	60	11	4	16	20
Big Valley	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	4				***************************************	2
Brooks			1	*	1 1				
Hanna				1		1	1 1 1 1 1 1 1	H	
. Lacombe	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	1			-			-
Trochu			1 1 1 1 1 1 1						6
Three Hills			1	-	1	-1 ÷	1	v -	۰.
Battle Biver			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 	1	1	1		1 1
Camrose							П	1	-
Tofield		1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1
Clover Bar	1 1 1 1 1 1				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	eo 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	90 t	20 t
Edmonton	1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	27 (1 - 1 - 1 - 1 - 1 - 1	ۍ ،	1	~ c	0
Namao	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	-	N -	-	-1	6	ବ ବ୍ୟ	
Website		4	4	-	4		1	>	o
Waballul			* 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1					
Jasner Park		10		ব্য	 	Н	1	00	∞
Yellowhead Pass	2	1	4	7	11	-	17	က	20
Mountain Park	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	67	П	1 - 1 - 1 - 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	 -	en	4
Peace River								1	1
	က	19	16	44	21	26	40	119	159

The following tables give the classification of accidents according to the Coal Field in which they occurred:

DOMESTIC.

VERNA - V	AB(ABOVE GROUND	ND	BE	BELOW GROUND	ND
CAUSE	Fatal	Serious	Slight	Fatal	Serious	Slight
Rope haulage, caught by cars off the track						
						
Horse haulage, crushed under cars					- 23	
Horse haulage, crushed under cars			1 1 1 1 1 1 1 1	1,		Н
Horse haulage, crushed between car and side of entry			1	-		1
Horse haulage, coupling cars				7		-
Horse haulage, foot crushed between rail and car						, ,
Mule haulage, kicked on head by mule	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	-
Hand nautage, nand crushed between rait and cars	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1		1	-
Hand haulage, slipped whife pushing car					П	
Hand haulage, sprained foot	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	Т
Shaft accident, crushed between cage and tipple			H			
Shaft accident, crushed between skip and side of shaft	1					
Shaft accident, crushed while crossing cage seat		1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1		H 1	1 1
Shaft accident, engine brake slipped		1 1 1 1 1 1 1 1 1				c
Fall of Tock at take of room while timbusing	1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1		#	
Fall of rook in nillar working		1	1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1	-, د
Fall of coal at face of crosscut.						·
Fall of coal at face of room		,		-	23	-
Electric coal cutter			1	1	Н	
Ignition of gas from open lamp.	1	 	 	1	1	27
Shot firing, open lamp fell in black powder	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2,

	1 1 1 1 1 1			1 4	!	33	
1						21	
H							•
				6	1		,
	2	H				 	3
	2			1		,	7
not firing went back on shots too Soon	to firing, struck by flying coal from shot	pple machineryruck by empty cars on tipple	ruck by loaded cars on tipple	R. cars, slipped while getting off moving cars	iscellaneous		

BITUMINOUS.

	AB(ABOVE GRONUD	αn	BE	BELOW GROUND	IND
CAUSE	Fatal	Serious	Slight	Fatal	Serious	Slight
Rope haulage, struck by runaway empty cars— Rope haulage, crushed between car and timber— Rope haulage, crushed between car and timber— Rope haulage, crushed while coupling cars— Rope haulage, struck by trip of loaded cars— Rope haulage, struck by trip of loaded cars— Compressed air locomotive haulage, coupling cars— Compressed air locomotive haulage, struck by timber dislodged by trip Compressed air locomotive haulage, crushed between door and loaded cars— Horse haulage, coupling————————————————————————————————————					11 22 17.2	
Horse haulage, foot caught under car-bumper————————————————————————————————————		HH	-	2 1 411	H-H	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7

	23	
10 н н н	23	
H	15	
111 2	15	
4040	11	
67	63	
Ignition of gas by shot in rock Premature ignition of detonator Premature explosion of powder— Asphyriation by gas in crosscut Fall of timber in room Slipped while coming down angle— Crushed between cars on tipple— Ignition of powder from fire in office— Unloading timber, caught by rolling timbers Went back on shots too soon— Miscellaneous		

Table showing accidents during 1918 classified according to the Mines in the DOMESTIC field in which they occurred:

			ABOVE (ABOVE GROUND			BELOW GROUND	ROUND		Total
Name of Operator	District	Fatal	Serious	Slight	Total	Fatal	Serions	Slight	Total	and
Can. Pac. Ry. Dept. Nat. Res. No. 3	Lethbridge							67	61	67
Can. Pac. Ry. Dept. Nat. Res. No. 6 Federal Coals 14d	Lethbridge		61	67	4		61	က	ო ⊢	o -
Union Collieries, Ltd.	Lethbridge					٠.				-
	Lethbridge					1	 	-	1	П
North Amer. Coll., Ltd., Coalhurst	Lethbridge								-	
Feter Jones, Coalnurst	Taber	T			1] 	1	-	- -
Regal Collieries. Ltd.	Taber	1	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1	 	 	Н	H	-
Guthro & Barr,	Bow Island	!	1			 		Н	-	-
Redcliff Brick & Coal Co., Ltd	Medicine Hat		1					-	-	П
Rosedale Coal & Clay Products, Ltd	Drumheller						m	1	က	က
Rose-Deer Coal Mining Co., Ltd	Drumbeller					1		-	-	-
]	Drumbeller					1 1 1		г	-	Н
North American Collieries, Ltd. (Mou						.—	_			
arch Mine)	Drumbeller	-	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	-	Н	67	0.1
Sterling Coal Co., Ltd.	Drumbeller		-		П	-				7
Alberta Block Coal Co., Ltd	Drumheller					-	1	Н	Н	-
Western Commercial Co., Ltd	Drumheller			-	-			20	20	9
Peerless Coal Co.	Drumheller			-	-		п		П	23
Scranton Coal Co., Ltd.	Drumheller					1		-	-	П
Hamilton Coal Co., Ltd.	Drumheller	[-	-	1		-	-	87
John Keehn	Hanna)			П			-
The Ben Nevis Mines, Ltd	Lacombe	1	1 1 1		1		1	-	-	П
The Ellis Coal Co., Ltd	Three Hills		1 1 1 1 1			1	-	-	27	67
Knee Hill Coal Co., Ltd	Carbon							П	-	г
Round Hill Collieries, Ltd	Camrose		-		-	1			1	-
Humberstone Coal Co., Ltd	Clover Bar					1 1 1 1 1 1		61	81	81
The Bush Mine Coal Co.								-	-	-
Keith & Fulton	Clover Bar					_	-		-	_

87488411	70
0 T 4 0 0 0 1 T T	80
4 1 1	33
0 1 2 2 1 1	21
	4
	12
1	9
1	ro
	-
The Great West Coal Co., Ltd Clover Bar Edmonton Collieries, Ltd Edmonton Twin City Coal Co., Ltd Edmonton Sturgeon Consolidated Coll., Ltd Edmonton Cardiff Collieries, Ltd Cardiff Cardiff Cardiff Cardiff Collieries, Ltd Cardiff	

Table showing accidents during 1918 classified according to the Mines in the BITUMINOUS field in which they occurred:

and an order of the second of	í		ABOVE (ABOVE GROUND			BELOW	BELOW GROUND		Total
Name of Operator	District	Fatal	Serious	Slight	Total	Fata1	Serious	Slight	Total	and
Hillcrest Collieries, Ltd.	Crow's Nest Pass			-	1	H •	1	Н.	es .	4
West Can. Collieries, Ltd., Bellevue International Coal & Coke Co. Ltd	Crow's Nest Pass Crow's Nest Pass		4		4		-	- ლი	4 F~ ¢	4 II .
McGillivray Creek Coal & Coke Co., Ltd West, Can. Coll. Ltd. (Green Hill)	Nest		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1	. 	101 -	4	o co +	o eo t
Canmore Coal Co, Ltd. Brazeau Collieries, Ltd.	Canmore			2	2	1	100	12	727	24.
Saunders Creek Dom. & Steam Coal Co., Ltd.	Brazean	 	6		 		უ -		o +	o =
Jasper Park Coll., Ltd.	Jasper Park					2	1		- 67	+ 67
North American Coll., Ltd. (Lovett) Olibhant.Munson Colliperies 1.4d	Jasper Fark Yellowhead Pass Vellowhead Pass	6	4		17	8	≈	- -	œ н с	9 н ç
Mountain Park Coal Co., Ltd.	Mountain Park		· -	1		6	1		2 H &	
						,			1	
		2	11	15	28	15	23	23	61	68

No accidents were reported as having occurred in the Authracite field during the year 1918.

LIST OF PROSECUTIONS UNDER THE MINES ACT DURING 1918.

Mine in which Contravention was Committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
North American Collieries, Ltd. (Lovett)	Miner	That he did leave powder can in mine. (Suh-sortion 6 of Section 113)	Convicted	\$10.00 or three months	\$2.50
North American Collieries, Ltd. (Lovett)	Miner	44 !	Convicted	Convicted \$10.00 or three months	\$2.50
North American Collieries Ltd. (Lovett)	Miner	That he did go into the boiler room and tamper with valves of the injector. (Section 97)	Convicted	\$10.00 or three months	\$2.50
North American Collieries, Ltd. (Lovett)	Track-layer	That he did go into the mine in an intoxicated condition. (Section 100)	Convicted	\$15.00 or three months	\$2.50
Yellowhead Coal Company. (No. 1 Seam)	Miner	That he did use a shot-firing battery to discharge his shots. (Clause "A" Sub-section 10, Section 65)	Convicted	Fined \$25.00	\$3.50
The Hillcrest Collieries, Lid. Miner	Miner	That he did walk up or down the No. 1 hoisting slope without permission of the manager or overman. (Subsection 2, Section 114)	Convicted	\$20.00 or one month	\$8.80
C. Freemont Henry	Operator	That he did fail to comply with Section 42 of The Mines Act for the month of May, 1918	Convicted	Fined \$5.00	\$3.00
Stephen Schmidt	Opcrator	That he did tall to comply with Section 42 of The Mines Act for the month of April and month of May, 1918	Convicted	Fined \$5.00	\$3.00

LIST OF PROSECUTIONS UNDER THE MINES ACT DURING 1918,—Continued.

Mine in which Contravention was Committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
The Canmore Coal Co., LtdM	Miner	That he did ride on cars in the mine without permission of the manager. (Section 103)	Convicted	mine ager. Convicted \$50.00 or two months	\$6.00
The Canmore Coal Co., Ltd. Rope-rider		That he did tie back with wire a safety switch handle. (Section 97) Convicted \$50.00 or two months	Convicted	\$50.00 of two months	\$12.00
R. Murtland	Operator	That he did operate the Murtland Mine No. 715 without a certificated per- son being in charge. (Sub-section 5, Section 29)	fine fion Convicted Fined \$10.00	Fined \$10.00	89.00
R. Murtland	Operator	That he did fail to have the necessary notices posted and registers kept. (Sub-section 3, Section 9, also Sections 126, 5, 10 and 60)	ept. Sec- Convicted Fined \$10.00	Fined \$10.00	00.6\$

MINE RESCUE AND FIRST AID WORK.

Mine Rescue Stations are in operation at the mines operated by the Canadian Pacific Railway Co., Department of Natural Resources, Lethbridge; North American Collieries, Ltd., Coalhurst; the Chinook Coal Co., Ltd., Commerce; the Jasper Park Collieries, Ltd., Pocahoutas; the Brazeau Collieries, Ltd., Nordegg; and the Mountain Park Coal Co., Ltd., Mountain Park.

In addition to these stations there are also three cars in operation. Car No. 1 visits all the mines in the Crow's Nest Pass District, Car No. 2 the mines at Canmore and Bankhead, and Car No. 3 the mines in the Drumheller and Big Valley-Districts.

Car No. 1 is under the charge of Mr. Edward Royle, Car No. 2, Mr. Wm. B. Powell, and Car No. 3, Mr. John Hooks. The Lethbridge, Commerce and Coalhurst stations are under the charge of Mr. Samuel Troman; the Pocahontas station, Mr. James Clyne; the Nordegg station, Mr. James M. Stewart; and the Mountain Park station, Mr. James Derbyshire.

The superintendents in charge of the cars and the Lethbridge, Commerce and Coalhurst stations, devote their whole time to instruction in first aid and mine rescue work, while the superintendents of the other stations are employed at the mines where the stations are located and devote whatever portion of their time is necessary to this work.

Messrs. Troman, Hooks and Royle are returned soldiers, and it is intended that, when consistent with efficiency, returned soldiers will in future be appointed superintendents of all mine rescue cars and stations.

The cars are fully equipped for mine rescue work and are divided into lecture-room, office, kitchen and toilet. A small engine and dynamo, and a set of batteries for recharging electric cap lamps that are used by the men when in training, have been installed in each car. These plants also supply light for the cars. Provision is also made for cooking and sleeping accommodation for persons engaged in mine rescue work. The cars can either be heated by heaters installed on the cars, or by steam supplied from the mines at which they are stationed.

Provision is also made at each car and station for the recharging of the portable electric lamps, by the electric plant at the mine at which the car or station is located, so that these lamps can be recharged without having to be removed from the car. This is in addition to the electric plant that is installed on each car.

The Edison electric cap lamp has now been installed on all the cars and stations with the exception of Car No. 2, which has the Wico Electric cap lamp. The Lethbridge, Commerce and Coalhurst stations have the use of the Edison Electric cap lamps at the mines at which these stations are located.

All the mine rescue apparatus at present in use in the Province is of the Proto type, and is capable of being used for at least two hours' continuous work. The Gibb mine rescue apparatus, after several tests had been made to prove its efficiency, was found to give satisfactory results, and it is expected that before the 31st of December, 1919, car No. 3 will be equipped with 10 sets of this apparatus, together with a full supply of spare parts for same.

The following is the equipment kept in each car and station (including ten apparatus of the Gibbs type, which have been ordered, but not yet received).

Ī		CARS		Lethbridge		Commerce	Nordegg	Pocahontas	Mountain	1
r,quipment	No. 1	No. 2	No. 3	Station	Station	Station	Station	Station	Park Station	Totals
Breathing apparatus (Gibbs)			10							10
Breathing apparatus (Proto)	10	10		10	10	2	L	11	9	64
Compression pump (Froto)		-		-			-			no es
Pulmotor Type A Pulmotor Type B	1	П	61		ı -	ı 	П		· =	10 1
Lungmotor		 		1				4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	16
Inhalation apparatus	H	ı 		ı]] ! ! ! !	a ia
1	Н	Н	-	н	1	1	Н	-) 7 ,
Meter for testing Reducing Valves	,1 ¢	Н	 (-	п	-	· г	· :	-	. 5.
Electric cap lamp (Edison)	77	19.	12				17	17	12	09
Stretchers	2	ļ —	 	2	-	-	-			7 -
abinet	-	H	,	-	-		1	4		1
Oxygen cylinders, 100 cub. ft. capac- ity (Proto)	10			×		14				Ş
Oxygen cylinders, 150 cub. ft. capac-	1			5	·		,	AT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	43
ity (Draeger)		9 %	∞ (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			∞ .	22
Lump caustic soda in the	2.800	2000 3060	102	9 890	298	100	200	550	712	4,514
Smoke helmets	90,1	9,00	701	7,020	1,004	1,100	2,100	1,000,1	7,500	18,616
Rectifier for re-charging electric	,	,	 		>	 	-	5		
lamps	1			-	1 1 1 1 1 1 1	1 1 1 1 1 1		H	**	231
Air generator for Gibbs apparatus			400							400
Charging racks for Edison electric		4								-1
cap lamps	— ·	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,					,	-	22
Spare rupper preaching bags		10	د-	ກ	1	-	∞	ص م	ຼ	£0

In addition, a sufficient supply of spare parts is kept at each car and station, so that repairs can be promptly made should any part of the apparatus become defective at any time.

The schedule of training at the stations and cars is as follows:

FIRST DAY.

Explanation of the apparatus by the Superintendent and demonstration with the pulmotor, lungmotor and inhalation apparatus, compression pump and animal air tester.

SECOND DAY.

Each member of the crew takes apart and assembles the apparatus, repeating the same until all are fully familiar with each part. Each member of the team demonstrates the application of the pulmotor, lungmotor and inhalation apparatus.

THIRD DAY.

Each member of the team wears the apparatus for two hours in fresh air while walking a distance of one mile.

FOURTH DAY.

Each member of the team wears the apparatus one hour in fresh air and one hour in smoke room in a vitiated atmosphere, making five trips through a tunnel 35 feet in length by 18 inches in height by 24 inches in width.

FIFTH DAY.

The members of the team wear the apparatus for two hours in a vitiated atmosphere in the smoke room, and build a brick stopping 6 feet square.

SIXTH DAY.

The members of the team wear the apparatus for two hours in a vitiated atmosphere in the smoke room, and build a brick stopping 6 feet square, after which they make 10 trips through a tunnel and carry 1,000 lbs. of rock a distance of 30 feet.

SEVENTH DAY.

Team makes a trip underground, carrying a stretcher for a distance of two miles.

EIGHTH DAY.

The work done on the seventh day is repeated.

NINTH DAY.

The work done on the sixth day is repeated.

TENTH DAY.

The team wear the apparatus for two hours and transport a weight of 100 lbs. on a stretcher up an incline rising 1 in 7 and 1,000

yards in length, then proceed into a vitiated atmosphere in the smoke room and build a brick stopping 6 feet square with a regulator 24 inches square through which a man is carried on the stretcher.

At the finish of each period of training each member of the team is required to thoroughly clean the apparatus he has been using, and to re-charge the small cylinder and re-assemble the apparatus, leaving it ready for use.

The complete course lasts ten days of two hours each. The method of procedure in the past has been that six months after this course was concluded the person who had undergone training was required to present himself for another day's training, after which, if he was found to be satisfactory, a certificate was awarded to him.

Arrangements have now been made that in future examinations will be held at each car and station, during the months of March and April in each year, of all persons who have taken a course of instruction during the previous year, before certificates will be granted for efficiency in Mine Rescue Work.

Although there has been an excessive shortage of men caused by the high percentage of miners who have enlisted for overseas service, the training in connection with first aid and mine rescue work has been carried on satisfactorily. One hundred and eighty men have undergone training in mine rescue work and 131 men in first aid work during the year.

Classes for the purpose of giving instruction in first aid work have been taken advantage of at a large number of the mines, with the result that the students who attended these classes have been successful in obtaining first aid certificates for 1st, 2nd and 3rd year from the St. John's Ambulance Association.

Arrangements have been made whereby two teams are selected from the trained men at each mine and each member of the team is required to take at least three hours' training during each month, for which he is paid 50c per hour. This payment is made by the Provincial Government, on receipt of a time-sheet from the superintendent of each car and station.

The teams are composed of five men each, one of whom is appointed captain. These arrangements were put into effect on the 1st of November, 1916, and are giving satisfaction.

Before any person is allowed to commence training in the use of the mine rescue apparatus, he is required to undergo a very strict medical examination.

In addition to the apparatus provided at the stations and cars the following mines have installed resuscitation devices:

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The following table gives particulars as to the number of persons trained in first aid and mine rescue work at the different mines in the Province since this work was first organized, but does not include those who may have been trained elsewhere than in the Province:

		sons trained is to 1918		ons trained og 1918
Name of Mine	Mine Rescue	First Aid	Mine Rescue	First Aid
C. P. R. No. 6 Mine	107	93	10	20
C. P. R. No. 3 Mine	40	27	5	10
North American Collieries, Ltd., Coal-			1	
hurst	73	77	5	
Chinook Coal Co., Ltd., Commerce	34	43	5	15
Rock Springs Coal & Brick Co., Ltd	15	10		
Canada West Coal Co., Ltd., Taber	40	40]] 10
West Canadian Collieries, Ltd., Blair-]		1	1
more	33	10	5	
West Canadian Collieries, Ltd., Belle-				
vue	68	30		[
McGillivray Creek Coal & Coke Co., Ltd.	30	40	5	5
Leitch Collieries, Ltd., Passburgh	10	10		
International Coal & Coke Co., Ltd	38	72		20
Hillcrest Collieries, Ltd.	27	5	5	31
Franco-Canadian Collieries, Ltd	20	[Í	
Burmis Coal Co., Ltd.	10	5		
Maple Leaf Coal Co., Ltd	5	5		
Brazeau Collieries, Ltd.	57	35	10	20
Canmore Coal Co., Ltd.	55	12 ·	5	
C. P. R. Co., Bankhead	35	10	5	
Georgetown Collieries, Ltd	13			
Jasper Park Collieries, Ltd	50	30	10	
Mountain Park Collieries, Ltd		1	10	 -
Western Commercial Co., Ltd	10	[[5	
Rosedeer Coal Mining Co., Ltd	1.0		5	
Western Gem Mining Co., Ltd	10		10	
Rosedale Coal & Clay Products Co., Ltd.	5		10	
Drumheller Land Co., Ltd	5		5	
Premier Coal Co., Ltd.	5		5	
Star Coal Mines, Ltd.	5		5	
Alberta Block Coal Co., Ltd	5		10	
Newcastle Coal Co., Ltd	5		5	
Midland Collieries, Ltd.	10		5	
North American Collieries, Ltd	5		5	
Sterling Coal Co., Ltd.	5			
Atlas Coal Co.			5	
Scranton Coal Co., Ltd.			5	
Peerless Coal Co., Ltd.]	5	
Hamilton Coal Co.		[5	
Excelsior Collieries, Ltd.			5	
Big Valley Collieries, Ltd.	5		5	
	845	564	180	131

It will be noted from this table that 1,025 men have undergone training with mine rescue apparatus and 695 men in first aid work.

One call was made during the year for Mine Rescue Car No. 1 by the Franco-Canadian Collieries on April 3rd. The use of the mine rescue apparatus was not required.

During the year no accidents have occurred in connection with the training of mine rescue crews. The Proto apparatus has proved to be very satisfactory, and training at all stations and cars has been carried on very efficiently during the year.

All expenses and salaries in connection with the equipment and operation of the stations and cars are paid by the Provincial Government, the mine operators being assessed one-half of the cost at the end of each calendar year. This arrangement was put into effect when the mine rescue work was commenced in the Province, and is working satisfactorily.

The Canadian Mining Institute has installed, at each station and ear, a branch library and provides the following publications: "Coal Age," "Colliery Engineer," "Science and Art of Mining," and "The Colliery Guardian," to which all mine employees and mining students have access.

The contest in first aid and mine rescue work was held at Lethbridge on July 1st, mine rescue teams taking part in the contest from the following mines in the Province: McGillivray Creek Coal and Coke Co., Ltd., Coleman; the International Coal & Coke Co., Ltd., Coleman; the North American Collieries, Ltd., Coalhurst; the C. P. R. No. 6 mine, Lethbridge; and the Drumheller Land Co., Drumheller. Teams taking part in the senior first aid contest were from Michel, Coleman, McGillivray, Commerce and Taber. Teams taking part in the junior first aid contest: Michel, Lethbridge, and Lethbridge Boy Scouts.

The successful contestants in the mine rescue competition were as follows: 1st, Drumheller Land Co., who were awarded the 1st prize and gold medals; 2nd, North American Collieries, Ltd., Coal hurst team, who were awarded 2nd prize with silver medals. The prizes in First Aid work were awarded as follows: 1st prize, with shield and gold medals, to the team from Michel, B.C.; 2nd prize with silver medals to the team from Coleman. The prizes in the Junior First Aid were awarded as follows: 1st prize with medals to team from Michel, B.C.; 2nd prize with watch fobs to team from Lethbridge.

Table showing Accidents during 1919 classified according to the mines in the DOMESTIC Field in

	Total	and below	L 10 10 11 - 4 4	69
occurred		Total	⊣ 70 444 ं 20 40	58
ich they	ROUND	Slight	: 22 4 4 ; 61 H	58
ld in wh	BELOW GROUND	Serious	- 31 : : : - 31	23
TIC Fie		Fatal	::::::	1-
DOMES		Total	:: " : "	1
es in the	ABOVE GROUND	Slight	::":"::	7
ule min	ABOVE	Serious	:::::	٠٠
വജിന		Fatal	:::::=	C1
g rore classifica accor	Dist	201706177	Clover Bar Edmonton Edmonton Namao Cardiff Pembina	
sections at the cassing according to the mines in the LUMESTIC field in which they occurred:	Name of Onerator		Marcus Collieries, Ltd. P. J. McPeak City Collieries Edmonton Collieries, Ltd. Namao Collieries, Ltd. Cardiff Collieries, Ltd. North Amer. Colls., Ltd.	

Name	Address	CERT. No.	Date Issued
Lennant, William G.	Lethbridge	403	10-4-J8
Laralr, Charles F	Drumheller	416	10-4-18
Lamb, Robson	Rosedale	448	10-4-18
Muir, David	Lovett	342	23-1-18
Moldowan William	Pocahontas	349	15-2-18
Morgan William J.	Coalspur	351	15-2-18
Mathewson, Archibald	Frank	362	14-3-18
Morris. David	Bellevue	382	14-3-18
Mossey, Thomas	Lethbridge		10-4-1 8
Marsh, William		423	10-4-18
March, James	Wayne	424	10-4-18
Moore, Thomas E	Drumheller	437	10-4-18
Milligan, Robert	Rosedale	447	10-4-18
McAulay, Daniel	Pocahontas	350	15-2-18
MacKinnon, Hugh G	Canmore	354	11-3-18
McAndrews. John	Blairmore	355	11-3-18
McKinnon, Alex. D	Coleman	376	14-3-18
MacDonald, John H	Nordegg	397	20-3-18
McQueen, George	Nordegg	398	20-3-18
McDonald, George	Drumheller	417	10-4-18
McKenzie, John	'Wayne	421	10-4-18
McAskill, Donald	Drumheller	439	10-4-18
McMillan, Daniel	Drumheller	442	10-4-18
McGladrie, Andrew	Lethbridge	411	10-4-18
North, Walter J.	Blairmore	359	11-3-18
Oakley, John	Mountain Park	393	20-3-18
Prentice, John G.	Frank	364	14-3-18
Pelnian, Mike	Commerce	365	14-3-18
Petrunia, John Andrew	Lethbridge	406	10-4-18
Powell, Albert E.	Wayne	427	10-4-18
Randall, David	Coleman	375	14-3-18
Robert, Louis P	Bellevue	399	20-3-18
Roberts, George	Taber	404	10-4-18
Riddoch, Thomas	Aerial	419	10-4-18
Roberts, David O	Wayne	428	10-4-18
Redpath, James	Wayne	431	10-4-18
Reid, Edward	Drumheller	440	10-4-13
Shaw, William	Calgary		7-3-18
Sono, Christopher			11-3-18
Siminick, Alex.	Commerce	366	14-3-13
Sihom, William	Canmore	369	14-3-18
Stirling, James	Nordegg	391	20-3-18
Smith, Thomas Edwin	Coalhurst	405	10-4-1 3
Sinclair, James		444	10-4-18
Thldyma, John	Pocahontas	347	15-2-18
Tisdale, James R.	Nordegg	387	20-3-18
Thomas, Joseph D.		433	10-4-18
Talot, William	Drumheller	446	10-4-19
Williams, Louis A.	Pocahontag	344	15-2-18
Wilson, William G.		394	20-3-18
White, John Marvin	Lethbridge	410	10-4-18
Williamson, John	Wovno	425	10-4-13
Wheatcroft, Fred	Drumheller	432	10-4-13
Zuskar, Andrew	Stafford Village	367	14-3-18

ANALYSIS OF COAL.

Kind of Name of mine from which sample was taken
Mine McGillivray Creek Coal &
Coke Co., Ltd.
Mine West Canadian Coll., Ltd Bellevue_
Mine West Canadian Coll., Ltd Bellevue_
Co., Ltd
Ltd
Federal Coa! Ltd. (No. 1)
Henderson & Shaw
1
Wine Chinook Coal Co., Ltd Commerce
Mine Rock Springs Coal & Brick
Co., Ltd.
Regal Collieries, Ltd
Mine 'George BragdichThelma
Mine Hillcrest Coll., LtdHillcrest_
MineFranco-Can. Coll., LtdFrank_
Mine Alfred Jackson Grassy Lake
Henry Theriault
nal Coal & Coke
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Mine Newsetle Cost Co. Ltd Drumbeller
Humbonstone Con Co. I to
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Humberstone Coal Co., Ltd.
Humbonstono Con Co. Ita
Humberstone Coal Co., Ltd
Chock Work Cool Co. 144
Mine Great West Coal Co., Ltd Edmonton

ANALYSIS OF COAL.—Continued.

		I														
	Remarks	Main entry.	Room No. 3.	North entry.	Room No. 2.	N. E. Entry.	Main entry.	Main entry	_	Main entry.	-	-	_	_	-	
Calorific	Value in B. T. U.	8660	8990	10865	9870	10190	9910	8710	0866	10330	9330	0896	9020	102201	9290	00.50
	Ash	5.60	6.50	5.70	10.70	7.40	8.00 8.00	10.80	8.90	9.50	18.20	7.80	7.60	8.30	18.00	0000
Proximate Analysis	Fixed	40.10	39.60	48.00	44.80	46.20	41.70	35.80	43.90	45.80	39.30	43.80	41.60	47.10	39.30	217
Proximate	Vola- tile Matter	29.70	33.20	37.60	31.30	31.30	34.40	31.10	33.20	34.10	30.70	32.50	31.00	33.90	28.70	0110
	Mois- ture	24.60	20.70	8.70	13.20	15.10	06.cT	22.30	14.00	10.90	11.80	15.90	19.80	10.70	14.00	7 42
	Address	Edmonton	Winnifred	Lethbridge	I aber	Taber	- Ey remore	Redcliff	Champion	Champlon	Lethbridge	Drumheller.	Drumheller.	Lethbridge_	Tethbridge-	Tothbridge
Name of mine from which	sample was taken		Guillo & Annon	rederal Coals (No. 1)	Golden West Coal Mining	Co., Ltd.	Redcliff Brick & Coal Co.	Ltd		1	John K. Hamilton	Western Gem Mining Co., Ltd. Drumheller	Fremier Coal Co., Ltd Drumheller	Wines	John K. Hamilton	Hederal (10 ale 1.40 V) Tothbridge
Kind of	sample	Mine	4 =	. =	; =	Mino	Mine	3	Mine	wine	4 -	7 F	4 1	4 :	-i ,	100
Name of person	taking sample	J. A. Richards	Moses Johnson	Moses Johnson	Moses Johnson	Moses Iohnson	Moses Johnson		Moses Johnson	Moses Johnson	Moses Johnson	D. McDonald	Mosse Tehnson	Moses Johnson	Moses Johnson	MOSES JOHNSON
which	was was taken	11- 7-18	95 7 18	8. 8.18	9- 8-18	91- 8-18	23- 8-18	0 0	29- 8-18	20-0-10	5- 0-10	5. 0.18	19, 0, 18	90 11 10	90 11 10	0T-TT-07

The following table gives the names and numbers of the districts, along with the name and address of the District Inspector of Mines in charge of each:

No. of District	Name of District	Name and Address of District Inspector of Mines
1 2	Crow's Nest Pass. Pincher Creek.	James Crowder, Blairmore, Alberta. Telephone No. 70.
3 4 5 6 7 8 9 10 16	Lethbridge. Magrath. Milk River. Taber. Bow Island. Medicine Hat. Aldersyde. High River. Brooks.	Moses Johnson, 204 Sherlock Block, Lethbridge, Alberta Telephone No. 325.
13 14	Drumheller. Big Valley.	Duncan McDonald, Calgary, Alberta. Telephone No. M2140.
17 19 12 20 21 11 15	Hanna. Trochu. Banff. Three Hills. Carbon. Canmore. Brazeau.	William Shaw, Calgary, Alberta. Telephone No. M2140.
18 22 23 24 25 26 27 28 29 30 31 31 32 33	Lacombe. Battle River. Camrose. Tofield. Clover Bar. Edmonton. Namao. Cardiff. Wabamun. Pembina. Jasper Park. Yellowhead Pass. Mountain Park. Peace River.	Robert J. Lee. 10167 115th Street, Edmonton, Alberta. Telephone No. 8215

In addition to the above, Mr. James A. Richards, 11009 89th Ave., Edmonton, is acting in the capacity of General District Inspector of Mines. Telephone No. 3662.

LIST OF MINES.

The following table gives particulars of mines which have been opened in the Province:

					J	Location	٠. خ				MARINE TO A		Date of	
Operator. Address.	Addr		riet O							Character	ter	5		Re
			Distr			αż	Ë		. ≒	01 COB.	 	Open- ing	nent	ing ing
Alberta Bailway & Irrigation CoLethbridge	Lethbridge		67			10	ю	-	-C	Comestic	1	1905	1906	1
	Lundbred	K X	2			23	<u>- 1</u>	01 j		Domestic	1	1906	1909	
	Edmonto	u	28	ei i	. 1/4	e 7	20	22	4.	Domestic		190.	107	1
Jo., Ltd	Lethbride		30 C	-	. 1/4	5 z	2 F	7.T 1.1	4 4	Domestic	1	1911	1913	1 1
Arblaster & Lloyd Bow Island	Bow Islan	1 d	- 10	ι Σ	7. 1/4	-	, က	15	4	Domestic		1913	1916	
	Reid Hil	1	6	S. EI	. 14	24	16	22	₹	Domestic	1	1914	1915	1
n John	Sheerness		17	L.S	1-1-1	17	29	13	4	Domestic		1914	1	-
Armour & Stauffer Morrin	Morrin	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14	L. S	. 2	28	31	21	4	Domestic		1915	GIAI	
Aune, George	Morrin	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14			22	31	21	4	Domestic	1	1915	1915	
:d[]	Drumbelle	er	25		7. 1/4	1 co	53	25	4 -	Domestic		1915		-
	Calgary		8 T S	1 1 1 1 1 1 1 1	Tot 20		II 58 25 Edmonton Set	S to	+ d	Domestic		1915		
Alberta Fenitentiary	Edmontor	1	3	men	3		70700	3			 	1		
Arndt. William Boundary	- Boundar	y Creek	ıc	Ľ.	i. 1	15	Н	56	₩	Domestic		1916		
Annon, Dominic Winnifred	Winnifre	d	۲-	r. S		22	12	10	4	Domestic	1	$\frac{1916}{2}$	1	1
Atlas Coal CoDrumheller	_ Drumhel	ler	13	ι Έ	. 14	10	29	50	4	Domestic	1	1917	1	-
e	- Rowley -		14	L S		13	32	21	4.	Domestic		1917		-
Acme Coal Mining Co., Ltd., The Wayne _	Mayne	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	133			_	2.2	٦. ا	-	Domestic	1).TGT		1
Auchenback, Andrew Thelma	Thelma		က		1. 1/4	12	2	က	4	Domestic	1	$\frac{1917}{2}$	1917	
Archibald, D.	Elcan		9	Ľ.		4	10	17	4	Domestic		1917	1918	
ning Co., Ltd	Medicine	Hat	∞ ;	Si N	. 1/4	ر ت	13	ဖွ	÷.	Domestic	1	1918	-	1
Allen, E. DRosalind	Rosaline		52	z Ei	. 1/4	18	43	11	4	Domestic		1918	-	1
Banach & Hoynak Strathcona	Strathe	na	56	Near	Near Edmonton South	n Sou	ıth.		_	Domestic		1897	1899	1

THE MINES BRANCH

LIST OF MINES—Continued.

		MANOAL METORI, 1910
	Re- Open- ing	1918
Date of	Aban- don- ment	1898 1900 1900 1905 1918 1918 1918 1918 1918 1918 1918 191
	Open- ing	1897 1897 1900 1900 1900 1900 1900 1900 1910 191
	Character of coal.	Domestic Dom
	ĭ.≅	
	74	Near St. Albert. Sheep Creek near Lineham. River Edmonton. River Edmonton. Indian Reserve, S. of Gleichen. Indian Reserve, S. of Gleichen. N. W. ¼
g	į Li	Line nontt n
Cocetton	Si Si	10 11 11 11 11 11 11 11 11 11 11 11 11 1
,	3	Near St. Albert. Sheep Creek nee Sheep Creek nee River Lot 42, E Biver Lot 42,
		St. Alber Creek I Creek I Lot 42, t. l. Reserve I I Lot 42, 1. l. Reserve I Lot 42, 1. l. l. l. l. l. l. l. l. l. l. l. l. l.
		E STANT STAN
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	District	221 22 2 8 4 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	Address.	St. Albert Eineham Eineham Eineham Edmonton Beverly Gleichen Three Hills Reid Hill Bowville Reid Hill Rovis Nevis Nevis Magrath Carbon Burdett Taber Cardiff Eyremore Cardiff Britain Forestburg Hastings Coulee Hastings Coulee Nordegg Kimball Gadsby
	Operator.	Bailey, Robert Bangs, J. A. Baldwin, J. Baldwin, J. Bush Mine Coal Co., The Blackfoot Indians Bothamley, C. F. Bennett, Isaac Bell, W. J. Bennett, Isaac Bell, W. J. Bennett, Isaac Bell, W. J. Bennett, Isaac Bell, W. J. Bennes, Charles Burnis Coal Co. Benver Dam Coal Co. Bradshaw Mining Co. Bradshaw Mining Co. Bradshaw Mining Co. Bradshaw Mining Co. Bradshaw Mining Co. Braker, Hoge & Baker Bawlf Collieries, Ltd., The Banner Coal Co. Belcourt, Louis Bish Bros. & Company Bish Bros. & Company Bish Bros. & Company Bish Bros. & Company Bish Bros. & Company Brazeau Collieries, Ltd. Big Chief Coal Mining Co. Ltd. Balnes, Herbert
٠.	Mine No	26 46 46 46 46 46 46 1172 1173 1174 1183 1183 1184 11

LIST OF MINES—Continued.

	Re-	Open- ing	
of			<u> </u>
Date of	Aban-	don- ment	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		Open- ing	1911 1912 1912 1912 1912 1913 1914 1914 1914 1915 1915 1916 1916 1916 1916
,	Character	of coal.	Domestic ——— Bituminous —— Domestic ——— Bituminous —— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Bituminous —— Domestic ——— Bituminous —— Domestic ——— Bituminous —— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ———— Domestic ————————————————————————————————————
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	Location	v i .	7. 4. 4. 5. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.
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		Distri No.	24 1 8 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		Address.	Rosenroll Cochrane Medicine Hat Big Valley Red Deer Diamond City Taber Lucky Strike Lineham Calgary Lucky Strike Lineham Lucky Strike Fincher Creek Warner Hill Springs Pincher Creek Drumheller Champion Lineham Hana Hana Hana Hana Hana Hallourt Armada
		Operator.	Battle River Collieries, Ltd. Bonnie Brae Coal & Quarries, Ltd. Brown, Moses Big Valley Collieries, Ltd. Bathurst Mining Co. Block Coal Collieries, Ltd. Block Coal Collieries, Ltd. Black, William Bergram, F. Consolidated with No. 433 Burns Coal Mines, Ltd. P. Bennie, James Scott Blue Diamond Coal Co., Ltd. Blue Diamond Coal Co., Ltd. Brocks, Burton Thomas Brooks, Edmund J. Brooks, Edmund J. Brooks, Burton Thomas Brooks, Burton Thomas Brooks, Burton Thomas Brooks, Burton Thomas Brooks, Burton Thomas Brooks, Burton Homas Brown, Charles E. Balls, Matthew Brisco, Frank Brisco, Frank Brisco, Frank Brisco, Frank Brown, Samuel H.
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LIST OF MINES—Continued.

		Ke- Open- ing	1		1						1					; ; ! !									-	1010
Date of		Aban- don- ment			1917	1010	0161	1918			1	1		1	1 1 1 1 1		 	1899	1906	1904	1		1907		1909	1911
		Open- ing	1916	1917	1917	1917	1918	1918	1918	1918	1918	1918	1000	1805	1807	1897	1902	1897	1902	1902	1908	$\cdot 1903$	1905	1905	1906	1907
	7.010	Of coal.	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Bituminous	Bituminons	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Anthracite	Domestic	Domestic	Domestic	Domestic
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		R	16	Ø	17	<i>1</i> 0 es	26	17	4	11	17	_	10	$\frac{1}{21}$	23	23	25	24		į	77	Π,	ر د	16	23 1.6	· .
	'n.	T.	39	<u>-</u>	10	20	က	17	53	12	17	18	24	6	53	53	55		ن.	1	99	97	5 0 0	5 0 0	23	Edmonton
	Location	αį	21	3	100	- 61 V	34	32	;	Η,	. 0	14	29	9	18	18	24	17	Ha	d	×	n o	N 5		13 7	Edm
	ទ		1/4	<u>-</u>	70	e	1	14	1	2	74	3		13	1/4	1	1/4	1/4	Near Medicine Ha	KOTOKS.	=-		t		14	Flats,
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The state of the s	Address.		Gadsby	Themas	Mayeroft	Lineham	Cardston	Eyremore Wabamun		Bow Island	Calcanor	Carbary	Canmore.	Lethbridge	Edmonton	Edmonton	Caruit	Medicine Hat	Obstoles	Names	Rankhood	Medicine Head	Taber	Carbon	Taber	Edmonton
	Operator.	-	Braggich George			ve	Bom Offer Coll Co	Ltd	~	Co	Ltd. P.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		t. Res	111111111	Cardiff Collienton 1 td mt.				h 397	pt. Res		The		ic Railway Co	City Collieries
.0	N	Mine	665 689	200	716	736	757	774	780	781	982		ο 1 ε	00	5 -	33	4	62	63	178	80	83	105	121	132	147

LIST OF MINES—Continued.

			THE MINES BRANCH	
	Re	Open- ing		
Date of	Aban-	don- ment	1913 1910 1916 1913 1913 1915 1916 1916 1916 1916 1916 1917 1918 1918	1
		Open- ing	1909 1910 1910 1910 1911 1911 1913 1914 1914 1916 1916 1916 1916 1917 1917 1917 1917	1918
	Character	of coal.	Bituminous —— Bituminous —— Domestic ——— Domestic ——— Domestic ——— Bituminous —— Bituminous —— Bituminous —— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Bituminous —— Bituminous —— Domestic ——— Domestic ——— Bituminous —— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ———— Domestic ———— Domestic ———— Domestic ————————————————————————————————————	Domestic
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	Address		Spokane Cochrane Cochrane Cochrane Commerce Wabamun Frank Cardston Sheerness Coalspur Namao Gadsby Edmonton Edmonton Banff Morrin Garden Plain Donalda Calgary Verdant Valley Cadomin Foreman Erskine Calgary Durn heller	"The difference
	**************************************	Operator.	Carbon Hill Coal & Coke Co	Colter, Evert Charles
) AT	əniM	220 220 220 226 226 226 3316 332 332 4424 422 423 4424 420 603 603 662 663 663 663 663 663 663 663 663 66	97)

LIST OF MINES—Continued.

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Z	Address	jo.			Location	Ton.			Character		4 han	
aniM.		irisiU .oM			, vi	Fi 	괊.	ĭ. ĭ.		Open- ing	don- ment	Open
 	Wayne	13	1	S. 7	J		i	4	Domestic	1918	1918	
767 Conlin, John	Carbon Lovett	32	그걸	S. 11	24	29 47	23	4 73	Domestic	1918 1918		
	Clover Bar	26		W. 14	7	53		4	Domestic	1903	į	
115 Dodds, Currie & Hoding	Carbon	21	,i.	S. 13.	12		7 73	41 4	Domestic	1906	10	-
	Creaty Lake	•			 1	10		÷ -	Domestic	1007	1010	-
155 Dawson Coal Co., Ltd.	Edmonton	56	. ≥	Lot-	25, Ec	<u>n</u>		ettle-		1907	0727	
166 Dwesk B. E.	VI.	~	Ħ	ment.		0	G	•	Domostio	1000	9	
	Taber	2 5			9.0	9 0	9 -	# ব	Domestic	1908	1909	-
	Livingstone	67	z.	W. 14	36	000	67	. ro	Domestic	1909	1910	
	Medicine Hat	∞			32	15	20	₹1	Domestic	1910	1914	
	Milk River	ر م	j		26		16	4	Domestic	1911	-	
273 Dayls & Green	(Halkirk	28	vi:	N. 14-	18	39	15	च ा ।	Domestic	1911	-	1
_	Noble	<u>ج</u> د			18		24	4	Domestic	1911	1913	-
	Big Valley	14		 '-'*,	36		200	₩,	Demostic	1911	1914	-
298 Consolidated with 290	Big Valley	14	i vi	** **	96 36	2.5	200	# 4	Domestic	1911	1914	1
	Rosebud	13	٠.	W. 1/4-	29		212	4	Domestic	1911	1707	
Davis, W. M.		14			34		21	4	Domestic	1911	1914	
		24	ς. Τ	E. 1/4-	35		19	4	Domestic	1912		
349 Drumneller Land Co., Ltd	Drumheller	e e			2	29		4	Domestic	1912	i -	
	T nolar States	31			<i>J</i> C 4	18		დ.	Domestic	1912	1916	-
<u> </u>	Baymond	o -	ı i	S. 13	- 0	no L	II	4.	Domestic	1913	17	-
	Pincher Greek	+6			Ö	o u	2 6	4. 4	Domestic	1914	1914	;

LIST OF MINES—Continued.

1	Re- Open- ing			1			1918	1917
Date of	Aban- don- ment	1915 - 1916 - 1916 - 1916 -	1918 -	1904 -	1898 - 1904 -	1905 -	1911 1907 1913 1914 	1915 -
Д	Open- ing	1914 1915 1915 1916	1917 1918 1918 1916	1897	1897 1901	1902	1902 1906 1907 1909 1909 1910	1913
	re.				 1 1 1			
	Character of coal.	Domestic Domestic Domestic	Domestic Domestic Domestic Domestic	Domestic	Domestic Domestic	Domestic	Domestic Domestic Domestic Domestic Domestic Domestic	Domestic Copper
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	Location.	31 16 14 35	1 inton 27 28	Edmo	n. Edmo	Edmo		
•	<u>ا</u> لا	4	3-6 1 10 Edmonton 13 27 14 28	ot 22,	dmonte	Lot 25,		**
		Z J J	id io	River Lot 22, Edmonton Settle-	ment. Near Edmonton. River Lot 20, E	ment. River Lot	ment.	
	District No.		18 19 18	26	26 26	26		12 7 20
	Address.	coulee	Φ				Hatake	81
	7	Maycroft Commerce Hastings Coulee	Taber Beverly Nanton Lethbrid Gadsby	Edmonton	Edmonton Edmonton	 Edmonton	Okotoks Medicine Hat. Elcan Grassy Lake- Champion Milk River Champion	Three Hills Whitla Calgary
	Operator.	Dennis, Wilson ————————————————————————————————————	Co., Ltd., The-)	Elliott & Louisberg Edmonton Edmonton		-b.	Ellis Coal Co., Ltd

LIST OF MINES—Continued.

		ANI	NUAL REPORT, 1918	11.
	Re- Open- ing			
Date of	Aban- don- ment		1918 1918 1918 1915 1917	1901 1898 1909 1906 1903 1914
	Open- ing	1917 1917 1917	1900 1900 1900 1900 1911 1912 1916 1916 1917 1918 1918	1898 1896 1898 1901 1902 1906
	Character of coal.	Domestic Domestic Domestic	Bituminous Domestic	Domestic Domestic Domestic Domestic Domestic Domestic
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ş	. i	53 29	78 88 88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	55 23 13 Treek. uth.
Location	S.	S. 15	W. S. S. S. S. S. S. S. S. S. S. S. S. S.	S. W. ½
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	District No.	25 13 6	255 2 2 2 2 2 3 3 1 2 2 2 3 3 1 2 3 4 5 1 2 2 3 3 1 2 3 4 5 1 2 3	27 10 26 25
	Address.	Edmonton South Drumheller	Frank Lethbridge Edmonton Clover Bar Bow Island Pleasant View Legal Elcan Halcourt Alix Alix Alix Alix Etchbridge Lethbridge Lethbridge Carmangay Lomond	Namao St. Albert High River Pincher Creek Edmonton
	Operator.	Edmonton Collieries, Ltd Eno, John Enterprise Coal Company	Franco-Canadian Collieries, Ltd. Federal Coals, Ltd. (No. 1) Frascr-Mackay Collieries, Ltd. Consolidated with No. 90 Fortune, John Foote, J. C. Fortin, W. Ferguson, David Finigan, John K. Falkner, William Fuller, W. R. Federal Coals, Ltd. Firth, Albert Fraser, Alec	Gibbard & Boutwell Gough & O'Neil Gillespie Bros. Great Northern Railway Gallagher & Hull Great West Coal Co., Ltd., The
.0	Mine N	699 701 702	48 548 90 98 323 342 342 351 660 665 667 713 773	13 27 35 67 89

LIST OF MINES—Continued.

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		Re	Open- ing	1	1 1	1 1 1		-	1915	!	1			 					.1918	-		
	Date of	Aban-	don- ment	1908	1917	1914	1916	1911	1914	1913	1912	1912	1914			1	1014	1011	1916	1915	1918	1916 1918
	-		Open- ing	1903 1907	1907	1909	1910	1911	1911	1911	1911	1912	1912	1913	1913	1913	1914	101	1915	1915	1915	1915 1916
		Character	of coal.	Domestic	Domestic	Domestic	Bituminous	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic
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			R.	23 Sett	22	(9)	9 ====================================	12	23 16	13,	6	ຜ	96	7 2	19	11	13	070	2 F	- 4	18	222
	,	'n.	Ŧ.	7 53 Edmonton	2-	6	25 25	က်	20 CS	6	13	16	53	6 6	28	က	5 8	4 6	90	0 60	41	33 55
		Location.	αż	7 Edm	7	101	7 7	16	e &	25	12	က	14	25. 25.	28	10	5 28 1 28	7 1	10	ء م	32	32 6
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				E. ½	ment. W. ¼ w		સં છ જ્જાં જ				W. 14			σά			E C				i szi	W. W. 44, 44, 44, 44, 44, 44, 44, 44, 44, 44
				S. E. River	S S	_	ńΖ			į	δ						νi.					<u>0, 0,</u>
			Distri No.	25 26	₹ 67	000	9 7	, 10	22	-	oc	ø	000	25	13	10	133	71 6	2 5	17	22	19 27
		Address	- Fruit 625.	Edmonton	Magrath	o o	Canmore	Lucky Strike	Edmonton	Grassy Lake	Medicine Hat	Medicine Hat	Gainford	Grassy Lake	Aerial	Groton	Aerial	Fishburn	Dolie	Dowling Lake		Namao
		***************************************	Operator	Great West Coal Co., Ltd., The	Gillespie, Francis	Geddes, Day & Gibb	Green, H. V. Georgetown Collieries, Ltd.	. !'	Great West Coal Co., Ltd., The	Gibson. George	Ginther, F. M.	Gardner, R.	Gainford Collieries, Ltd	Grant, John A. George S. Gibson. George S.	Consolidated with No. 436	Goodie, Philip	Great West Coal Co., Ltd.	Gilfuth, James A.	Garaner, Fred	Giedd. Fred	Griffiths, Evan	Gordon, D. R. Gwilliam, Dayid
1		.oV	Mine I	99	$\frac{162}{184}$	200	231	278	283	294	297	536	352	377	378	421	436	458	403	487	603	623 645

LIST OF MINES—Continued.

		221110112			-,	
	Ke- Open- ing			! ! !		
Date of	Aban- don- ment	1917	1905	1899	1910	1913 1909 1917 1913 1915 1914 1915 1915
	Open- ing	1917 1917 1917 1918 1918	1896	1899	1905 1899 1906	1907 1908 1908 1909 1909 1910 1911 1911
	Character of coal.	Domestic Domestic Domestic Domestic Domestic Domestic Domestic	Domestic	Domestic	Bituminous Domestic Domestic	Domestic Dom
	ĭ ĭ ĭ	44444	tle-	หลา	5 4 tle-	4 4 4 4 10 4 4 4 4 4 4 7
	괊	13 20 18 18 18	Set	tcher	3 5 23 4 1 Settle-	22 4 4 2 2 2 2 3 2 4 4 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
. uo	Ę	29 488 27 21 48	Edmonton Settle-	Saskatchewan	18 7 7 53 Edmonton	16 9 10 10 10 10 10 10 38 38 38
Location	α	25 11 14 32 30 30	Edr	ż		22 111 12 15 15 15 15 15 15 15 15 15 15 15 15 15
Ţ		7	River Lot 12,	Big Island,	r. ¼ 15 Lot 22,	"4
		જ્.જ.ં છે.	ver	ig Isl	N. E. L. S. River	स संक्रं संसंस
	.oV	ijië Silië				z ww wzz
30	Distric	13 13 23 23 23	- 26	- 26	 25 26	217
•	Address.	Grassy Lake Drumheller Round Hill Drumheller Cluny Round Hill	Edmonton	Strathcona	Hillcrest Beverly Edmonton	Reid Hill Taber Taber Carbon Burmis Three Hills Brunetta Lethbridge Bow Island Halkirk Carstor Carbon Carbo
	Operator	Gibson, Samuel Gillespie & Kirkland Goss Collieries, Ltd. Gouge, Jesse Gouge, Jesse Goss, M. T.	Humberstone, William	Holloway, R	Hillcrest Collieries, Ltd	Henderson Brothers Hart, Edward Hedstrom Brothers Head Syndicate, Ltd. Halbert, William Henderson, Samuel Heighes, George Hutchison, John S. Hankirk Collieries, Ltd.
.ol	Mine V	687 701 724 728 747 760	9	17	40 43 109	134 171 181 189 224 224 272 272 274

LIST OF MINES—Continued.

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					Location	Hon.						Date of	
	Operator.	Address.			TOCA!	1011.			Character	ter		A han.	R.
			Distri No		σά	Ŧ.	표	Μ.	of coal.		Open- ing	don- ment	Open- ing
	Henry, Charles F.	Bow Island	7	0.	13 6	00	ļ <u>\$</u>	4	Domestic		1912	1918	
366		Grassy Lake	2	. q	Gras	Lak		4	Domestic		1912	1913	1
	Hedrich, William	- Trochu	19	S.	}		23	4	Domestic		1912	1913	
380		- Delia	17			30	17	4	Domestic		1913	1918	
_	Hallett, Thomas	Castor	18	Eİ.	1		14	4	Domestic		1913		
426		Trochu	19	Z E	14 12		23	4	Domestic		1914	1918	
_		- Halkirk	18	σi	-			4	Domestic	-	1914	-	-
_		- Gueenstown	6		23	3 18		4	Domestic		1914	1915	
	Hildani, Edwin	Morrin	4:					4	Domestic	-	1915	1917	
	Hailiday, George W.	- Delia	17		-	30	17	-4	Domestic	1 1	1915	1	
	5	-(Eucan	9		24	10	17	4	Domestic	1	1915		-
000	Harrison, Stephen	Lethbridge	m 6	χ.	74 35		22	4	Domestic	-	1916	1916	1
#10	Hannan, G. G.	- reinbridge	m (κi	l	10	21	4	Domestic	1	1916	1918	
604	Hodgeon Tosonh	Letnbridge	٠ - -	σż	-			+	Domestic	1 1 1	1916		-
	Hunter, John T.	Garden Disin	14 17	zi z	13 12	33		4.	Domestic		1917	11	1
	Hamilton Coal Co., Ltd.	Wavne	- 65	ก่ เ	1			4 4	Domestic		1917	191,	1
	Halbert, David	Rose Lynn	6	i u	~			4, 4	Domestic		1917	10	1
	Halbert, William	Trochu	16	5 2 2	, 1		7 6	# V	Domestic	1	1917	1918	-
	Hetherington, Frederick	Carmangay	6	i v			3 2	۲ ج	Domestic	1	1016	1010	
	Hamilton, W. L.	- Pincher Creek	67	i			1 -	14	Domestic	1 1 1	1018	1010	-
	Hannah, G. G	Lethbridge	n	v.	2 17	10	٠ ټ	4	Domestic	1	1018	0161	
	Hamilton, J. K.	- Lethbridge	က	i vi	4	•	22	4	Domestic	1	1918	-	-
	Hutchinson, W.	Beynon	13	κά		2	$\frac{1}{20}$	4	Domestic	! ! !	1918	1918	
	Hanson, C. H.	- Ferry Point	22		13	-	18	4	Domestic		1918	1	
	Halbert, David	- Sheerness	17	L. S. 1	1		13	4	Domestic		1918		
_	Haywood, A	- Gadsby	18	闰	7 7	, 40	16	4	Domestic		1918		
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LIST OF MINES—Continued.

	Re- Open- ing	
Date of	Aban- don- ment	1910 1910 1910 1910 1910 1910 1911 1911
	Open- ing	1906 1906 1906 1907 1907 1910 1911 1911 1911 1911 1911
	Character of coal.	Bituminous — Domestic ——
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	.oN	<u> </u>
	District	132 2 2 2 1 1 1 2 2 1 3 2 2 3 3 2 4 3 3 3 3 3 3 3 3 3 3 3 3 3
	Address.	Coleman Elcan Elcan Winnipeg Taber Drumheller Heatherbrae Halkirk Pocahontas Gadsby Milk River Maycroft Delia Delia Delia Pendan D'Oreille Donalda Pendant D'Oreille Cassy Lake Grassy Lake Grassy Lake Grassy Lake Chrassy Lake Drumheller
	Operator.	International Coal & Coke Co., Ltd Irvine, Thomas Independent Coal Co., Ltd., The International Land Dev. Co. Inperial Coal Co. Ivey, John S. James, C. K. Jacobson, John S. Jacobson, John S. Jacobson, John S. Jacobson, John S. Jacobson, John S. Jacobson, John S. Jacobson, John S. Jacobson, John S. Jacobson, James C. Jacobson, James C. Jacobson, Walter S. Jackson, James & Chiddley Sakson, Walter S. Jackson, James S. Jackson, James S. Jackson, Alfred Sakson, Alfred Jackson, Alfred J
	oM əniM	88 1111 1114 1138 1159 1488 1488 1488 1488 1488 1488 1488 148

LIST OF MINES—Continuea.

		THE MINES BRANCH	
	Re- Open- ing		
Date of	Aban- don- ment	1918 1918 1918 1918 1918 1918 1918	1915 1914
	Open- ing	1898 1902 1906 1906 1906 1906 1910 1911 1911 1912 1913 1914 1916 1916 1916 1916	1906 1907 1909 1909 1909
	Character of coal.	Domestic Domestic Dituminous Domestic Domestic Bituminous Domestic	Bituminous —— Domestic ——— Domestic ——— Domestic ——— Domestic ——— Domestic ———
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5	F	200 200 200 200 200 200 200 200 200 200	110 111 122 28
Location	Si si	11	14 36 36 36 22
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	.oN	LNLNLNNNNN CLLNNNN L L L L L L L L L L L	12481 12481 12481
-	Address.	Carbon ————————————————————————————————————	Passburg Travers Bow Island Lethbridge Bow Island Fraserton
	Operator.	Knee Hill Coal Co., Ltd. ————————————————————————————————————	Leitch Collieries, Ltd., The Pa Larson, Andrew Long, D. H Bo Lethbridge, City of Leindquist, A. A. Laarz, F. W Fr
.01	Mine 1	53 103 1120 1125 1125 1126 1125 1134 2277 2277 2271 2315 3315 339 440 440 480 480 480 480 480 480 480 480	126 131 185 192 205 309

LIST OF MINES—Continued.

					Location	i						Date of		
οN	Onerator.	Address	toi		Loca	TOIL.		_	Character	<u> </u>		A han-	Rp.	
Mine			risiG oM		ഗ്	E.	껉	ĭ.≅	of coal.		Open- ing	don- ment	Open-	
319	Lake View Coal Co.	Wabamun	29		29		4	ıc	Domestic		1911	1914		
324	Lavenne, Jules	Winnifred	-	L. S. 5.	22	12	10	- 	Domestic		1911	1916		A
330°	Lees, W. R.	Pincher Creek	e.:		25		87	10	Domestic		1911	1918		NI
375	Lohrmann & Baxter	Garden Plain	17	αį	1	34	14	4	Domestic _	1	1912			NU
400	Lavenne, Jules	Winnifred	22	1/2,	S. 8 21	12	10	4	Domestic _	1	1913	1918		Al
419	Lakeside Coals, Ltd.	Wabamun	29	L. S. 15	6	53	4	10	Domestic _	1	1913	 		L
423	Loiselle & Heinke	Trochu	13	Βİ	- 1		22	4	Domestic_	-	1.914	1917		K
441	Linder, Karl	Halkirk	18	vi vi	18		15	4	Domestic _	1	1914	1918		EI
467	Lancaster & Willan	Camrose	23				19	71	Domestic _	1	1915	1915		90
601	Law, George	Round Hill	23		10		18	4	Domestic _		1915			RT
613	Lindquist & Anderson	Donalda	22	L. S. 7 &	8	14	17	41	Comestic _		1915	1 1		,
618	Lux & Harrison	Foreman	22				16	41	Domestic _	 	1915	1918	.	18
677	Lavenne, Jules	Winnifred	<u>-</u>		21		10	4	Domestic _	 	1917	1917	1	11
869	Lanark Coal Co.	Elcan	9		4		17	4	Domestic _		1917	1918		8
902	Lyon, H. E.	Morley	11		17	26	ro	10	Bituminous	1	1917			
419	Lytkowski, William P.	Donalda	22	L. S. 1		42	16.	4	Domestic _	1 1 1	1917			
740	Lindquist, Victor	Aerial	13	S.	1-12 29		19	4	Domestic _	1	1918	1918		
751	Lavenne, Jules	Winnifred	<u>-</u>		27		10	4	Domestic _	1	1918			
ro	Martin, Robert	Strathcona	26	River Lot 26, Edmonton Settle-	t 26, Ec	Imonto	n Sett		Domestic _		1897	1902	1	
12	Martin & King	Strathcona	26	River Lot	t 26, E	26, Edmonton Settle-	n Sett		Domestic _		1897	1904		
15	Marsh & Neeb	Strathcona	26	ment. River Lot	18,	Edmonton Settle-	n Sett		Domestic _	1	1897	1902		
52	Mays Coal Co.	Edmonton	25	ment.	7	53	23	-4	Domestic _	 	1901	1902		11
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LIST OF MINES—Continued.

LIST OF MINES—Continued.

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S. W. 14
N. W. 14
L. S. 15 24 28 18 4 L. S. 3 24 34 22 4 L. S. 3 2 28 20 4 L. S. 4 11 29 20 4
L. S. 3 2 28 L. S. 4 11 29
L. S. 3. 4. 1. 2. 2. 2. 2. 2. 3. 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
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LIST OF MINES—Continued.

Re- Open- ing	1918	
Aban- don- ment	1913 1917 1916 1917 1917 1913 1909	1916 1913 1913 1914 1914 1914 1914 1914
Open- ing	1913 1914 1916 1916 1916 1916 1916 1900 1900 1900	1910 1911 1911 1912 1912 1913 1913
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Uperator.	McGuire, A. J. McRae Bros. McPherson, Peter McTadden & Farnell McLean, Charles A. McAlpine, Alax. H. McDonald, William Consolidated with 275 Nash, Thomas Namao Coal Co. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd.	Collieries, val Syndica (Collieries, val Syndica (Collieries, value) (Collieries, valu
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LIST OF MINES—Continued.

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	Re-	Open- ing				1918	
Date of	Aban-	don- ment		1915	1918	1917 1907 1913 1914 1914	1913 1918 1913 1913
		Open- ing	1019	1913 1914 1914 1917	1899 1909 1904 1911 1916 1916	1918 1897 1907 1907 1908 1909	1910 1911 1911 1912 1913
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	Address.		Drumheller	Wabamun Hutton	Medicine Hat Magrath Clover Bar Pincher Creek Oliphant Mines Hanna	Donalda	Wilk River Carbon Strathcona
	Operator.		North American Collieries, Ltd.	New Bra Coal Co., Ltd. Noble, W. G. Nattrass, D. W.	Oliphant, John Oliver, Benjamin Ottewell, R. P. Owen, J. H. Oliphant-Munson Collieries, Ltd. Olson, Emil	Peerless Coal Co., Ltd. Patterson, Thomas Pincher Creek Coal Mining Co. Perry, James Consolidated with 226 (Prairie Coal) Prairie Coal Co., Ltd.	Paulson, F. A. Poxon, John Petrie, J. H. Peace River Collieries, Ltd.
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LIST OF MINES—Continued.

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394	Palmer Coal Co.	Burmis	7-2	25 mil	25 miles S.W. of Burmis	of B1	ırmis			Bituminous	1913	1913		
411	Pyrah, Samuel	Magrath	4			×	×	21	4	Domestic	1913	1914		
413	Page & Dayton	Raymond	4	N. W. 14	1/4	29	4	20	4	Domestic	1913	1915		
414	Popik, Dan	Berford	36		!	4	48	22	4	Domestic	1913	1914	1	ı
439	Premier Coal Co., Ltd	Drumheller	13	ľ.	3	10	29	20	4	Domestic	1914			
444	Payne, Philip T.	Calgary	20	S	L. S. 11	14	31	24	4	Domestic	1914	1	-	1
448	Pollitt, James B.	Bow Island	<u>-</u>	r. S	7	-36	11	11	4	Domestic	1914			
209	Pleming & Regal	Donalda	52	r. S	8	30	41	17	4	Domestic	1915	1916	-	,
621	Pattison, Charles H.	Carbon	2			11	29	23	- #	Domestic	1915	1916	1	
626	Ployart, Athol L.	Parr	17	Ľ.	1	9	29	14	4	Domestic	1915			
643	Peerless Coal Co.	Wayne	13	Si Ei	1/4	!	28	19	4	Domestic	1916			
650	Perulzzo & Long	Beazer	က	Ľ. S	16	9	61	26	4	Domestic	1916			
662	Pickering, William H.	Donalda	52	ľ. S	5	29	41	17	4	Domestic	1916	1917	1	,
681	Parge, Charles H.	Twining	20	zi Zi	1/4	Н	31	24	4	Domestic	1917	1917	1	
723	Pattison, Robert	Verdant Valley	13	ľ.	13	35	28	18	4	Domestic	1917			
742	Pederson, Laurtez	Donalda	22	r. S	13	16	42	17	4	Domestic	1918	1		1
277	Porter, Robb & Morino	Coalspur	32	S. ₩.	1/4	14	49	21	70	Domestic	1918	1 1 1 1 1 1 1 1 1 1		
18	Ramsay & George	Edmonton South	26	River	River Lot 23,	Edn	Edmonton Settle-	n Set	tle-	Domestic	1897	1907	1 1	
29	Radford, T. J.	Edmonton South	26	L. S.	11	25	51	25	₩	Domestic	1897			
33	Reliance Coal Mining Co.	Taber	9				6		4	Domestic	1905	1909		
51	Kansome, M. E	Edmonton	22	River Lot	Lot 42,		Edmonton		Settle-	Domestic	1901	1906	-	,
55	Rollingson, John	Lethbridge	60	L. S.	4	18	2	21	4	Domestic	1902		1	ı
3	Rech, Charles	Namao	27	r. S	44	16	50.	47	₩.	Domestic	1903	1917		
70	regal comeries, Lua.	Taber	£.			×	10	16	-	Domestic	1907	1916		,

LIST OF MINES—Continued.

		ANNUAL REPORT, 1918	123
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Date of	Aban- don- ment	1913 1909 1909 1908 1915 1916 1918 1914 1914 1914 1914	1916 1913 1918 1914 1914
	Open- ing	1904 1907 1907 1908 1908 1908 1908 1910 1910 1910 1911 1911	1912 1912 1913 1914 1914
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	Operator.	ck Co., Ltd. ck Co., Ltd. d. d. ho, Ltd. roducts Co.,	Roberts, William Rathburn, L. F. Redcliff Pressed Brick Co., Ltd.
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LIST OF MINES—Continued.

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450	Robinson, William	Forestburg	22	L. S.	835	. 40	15	4	Domestic		1914	1915	
465		Grassy Lake	2 7	Si ν Ei α	143	10	13	44 4	Domestic	1	1915	1917	-
479		Craigmyle	17		3/4	4.4	17	; 4	Domestic		1915	1915	
493	ith 325 (E. Wimmer)	Castor	82.5	ř		1	c	10	Domestic	1 1 1 1 1 1	1915	1016	
809	Richmond, Andrew	Erskine	182		15		22.2	→	Domestic		1915	1916	
653	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Halcourt	34	εi Εi	1 1		디	9	Domestic		1916	1917	
671		Ghost Pine Creek	7 7 8	-		00 ×	22 4	₩ ₹	Domestic	1	1916	1917	1
720	Rudolph Brothers	Edmonton South		i si i Li	13		25	H - i t	Domestic		1917		1 1
734	Co	Aerial	3		11 & 14		19	4	Domestic	-	1918	-	
738	Rollingson, G. W.	Lethbridge		പ്. സ്	7 13	∞ 5	225	-1 1 -	Domestic	1 1 1	1918	10	
763		Aerial	2 5		12, 15	282	0 6	4 4	Domestic	 	1918	Tare	
765 794	Joal Co., Ltd.	RedcliffEtzikom		<u>1</u> .8.	14	13	96	44	Domestic Domestic		1918 1918		
28	Stewart & CampbellStrathcona Coal Co.	Namao South	27 26	N. E. River	14 Lot 9,	8 55 Edmonton	64	34 4 Settle-	Domestic Domestic	 	$\frac{1897}{1905}$	1913 1911	; ; ; ; ; ;
61 101 110 135 144 157	Scott, Fred	Medicine Hat Edmonton Namao Carmangay Pincher Creek	82778	S. E. W.	nt. 14 6 2 36 2 36 14 8	13 55 14 10 10	22 22 11	444454	Domestic Domestic Domestic Domestic Domestic		1906 1905 1906 1906 1907 1907	1911 1911 1917 1914 1911	

LIST OF MINES—Continued.

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LIST OF MINES—Continued.

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	Operator.		Saunders Creek Domestic & Steam Coal Co Smith, Frank Sterling Coal Co., Ltd. Smith, T. Edwin Steen, Herman Steinberg, Gus Strilszyk, Louis Strilszyk, Louis Strilszyk, Louis Strilszyk, Louis Strilszyk, Louis Strilszyk, Louis Strilszyk, Louis Strilszyk, Louis Stringer, Lawson Strader, Lawson Strader, Lawson Strader, Lawson Strader, Lawson Strader, Jackson & Ring Strickland, Thomas Strickland, Thomas Strickland, Thomas Strickland, Thomas Strickland, Thomas	
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LIST OF MINES-Continued.

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	Address.		Namao	Lundbreck Mine	Three Hills	Three Hills	Casinpion	Tofield	High Kiver		Diamond City		Pincher Creek	Trochu	Windy Edge	Warner Course	Lousana	Ferry Point	Three Hills	Grand Prairie	Alix	Aerial	Garden Plain
	Operator.		Talbot, Mr.	Tonge, Thomas	Three Hills Coal & Dev. Co., Ltd		Tofield Coal Co., Consolidated with	252	Twin City Coal Co. Ltd.		Thomas, John	Tofield Coal Co., Ltd	Tonge & Groton	Trochu Coal Co., The	Thorps, George W.	Toth John	Thompson. Ole	Tate, John	Trentham, William T.	Taft, John B.	Tredway Co., D	Thomas, Joseph D.	Unsworth, Robert
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LIST OF MINES—Continued.

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Date of	Aban- don- ment	1918	1913 1916 1916 1916 1917 1917 1918 1918
	Open- ing	1918 1912 1916	1902 1903 1903 1906 1906 1907 1909 1909 1909 1910 1911 1911 1911
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	Address.	Lethbridge Prospy Grand Prairie	Blairmore Lundbreck Bellevue. Leduc Three Hills Strathcona. Three Hills Edmonton Milk River Bow Island Carbon Blairmore Champion Taber Castor Heisler Gadsby Ardley Delia Priddis
	Operator.	Urwin, Wm	West Canadian Collieries, Ltd. Welsh, William West Canadian Collieries, Ltd. Wilson, John Watson, George Watson, George Western Coal, Ltd. Walker, Leo. J. Walwork, James Watson & Pattison Watson & Pattison Watkins, Watkin E. Watkins, Watkin E. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, Joseph Watson, George Walsh, William R. Wilson, J.
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LIST OF MINES—Continued.

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		Open- ing	1913	1914	1914	1914	1914	1914	1915	1915	1915			1916	1916	1917	1917	1917	1917	1918	1918	1918	1918	1918	1918	7	1011	1911
·	Character	of coal.	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic			Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic		Bituminous	Domestic
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	Operator.		Wall, J. H.	& Co.		& G.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	Samuel	n, Arthur	- -	oski, M. S., Consolidated with		Co., Ltd	11	Co., Ltd	1		ınningham		, Ltd	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	West End Coal Co	R	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Vellowhead Coal Co	90	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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LIST OF MINES—Continued.

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BOARD OF EXAMINERS.

The constitution of this Board during 1918 was as follows:

As representing:

- (a) The Mine Inspectorate:

 John T. Stirling, Chief Inspector of Mines.
- (b) Managers:
 Messrs. Robert Livingstone and William P. Williams.
- (c) Miners:
 Messrs. Evan Morgan and Andrew Goodwin.

Examinations were held during the year as follows:

For First and Second Class Certificates, on May 8, 9 and 10, 1918, at Blairmore, Lethbridge, Calgary, Edmonton, Nordegg and Mountain Park.

For Third Class Certificates, at Edmonton, on April 1, and April 9; Pocahontas, April 4; Mountain Park, April 6; Drumheller, April 16; Canmore, April 18; Taber, April 23; Lethbridge, April 24; Blairmore, March 22 and April 29; Nordegg, May 10; and Calgary, May 16.

For Mine Surveyors' Certificates, on May 19, at Blairmore, Lethbridge, Calgary, Edmonton and Nordegg.

Twenty-five candidates presented themselves for examination for First Class Certificates, of whom nine were successful; fifty-three for Second Class Certificates, of whom twenty-seven were successful; sixty-one for Third Class Certificates, of whom forty-seven were successful; and twelve for Mine Surveyors' Certificates, of whom seven were successful.

During the year, two hundred and twenty-three Provisional Certificates were issued authorizing the holders of these certificates to act as overmen until they had an opportunity of obtaining certificates by examination.

List of Names of Holders of First Class Certificates issued by the Government of the Province of Alberta during 1918.

Name	Address	CERT. No.	DATE ISSUED
Bllson, G. H		27 26	28- 6-18 28- 6-18
Brown, R. J.		30	3- 7-1 8
McDonald, N. M	Bellevue	33	9- 7-18
Puckett, O. L.	Drumheller	29	3- 7-18
Quigley, D. H.	Coalhurst	28	28- 6-18
Ramsay, P. M.	Canmore	34	12-11-18
Smith, T. E.	Coalhurst	31	3- 7-18
Watters, A. G.	Bankhead	32	5- 7-19

List of Names of Holders of Second Class Certificates issued by the Government of the Province of Alberta during 1918.

Blair, John	Edmonton	72	11- 7-18
Bovio, M.	Rollovuo	61	5- 7-18
Brearley, G.	Euromoro	78	23- 7-18
Brearley, G.	Eyremore	10	25- (-15
Crawford, John	Pocahontas	64	6- 7-18
Crawford, W. S.	Lethbridge	66	9- 7-18
Fortner, E.	Saunders	57	3- 7-18
France, Thomas	Nordegg	67	9- 7-18
Hargreaves, G	Lathhridge	70	9- 7-13
Hastings, A. P.	Bankhaad	62	5- 7-18
Hulme, Charles	Nordegg	63	6- 7-18
Hulme, Charles	Nordegg	0.0	0- 1-19
Ironmonger, John	Hillcrest	60	5- 7-18
Jackson, John	Bellevue	56	3- 7-18
Joherg. A. F.	Delia	68	9- 7-18
Joherg, A. F. Jones, C. E. R.	Cardiff	83	12-11-18
Larrair, C. F.	Drumheller	74	12- 7-18
MacAskill, D.	Drumheller	77	16- 7-18
McKinnon, H. G.		76	13- 7-18
McKinnon, J. L.		80	26- 7-18
McQueen, A.		71	9- 7-18
		70	11 -10
Nugent, Bernard	Taper	73	11- 7-18
Park, William	Bellevue	65	6- 7-18
Rlchards, Evan	Evansburgh	59	3- 7-18
Roberts, G.	Taber	79	23- 7-18
	į į	· · · · · · · · · · · · · · · · · · ·	
Sinclair, James	Drumheller	81	7- 7-18
Tennant, R.	Lethbridge	58	3- 7-18
Tully, Thomas	Fernie, B. C	75	12- 7-18
Worthlngton, T.	Lethbridge	69	9- 7-18

List of Names of Holders of Third Class Certificates issued by the Government of the Province of Alberta during 1918.

Name	Address	CERT. No.	DATE ISSUED
Armstrong, P. M.	Nordegg	224	8- 6-18
Bobrovski, M	Mt. Park	217	5- 6-18
Baird, William	Drumheller	218	5- 6-18
Brooks, Claude E.	Drumheller	220	8- 6-18
Campbell, G. P.		229	8- 6-18
Chapman, C.		232	12- 6-18
Collins, Sidney, G	Edmonton	219	5- 6-18
Dawes, Edmund	Drumheller	222	8- 6-18
Dunnigan, E.	Bankhead	216	1- 6-18
Eno, John W.	Drumheller	223	8- 6-13
Gammie, J. S.	Drumheller	226	8- 6-18
Hartley, Thomas	Bankhead	227	8- 6-18
Head, James	Taber	209	1- 6-18
Hedges, R.	Beverly	239	29- 8-18
Hodgkinson, J. A	Edmonton	205	1- 6-13
Hooks, J. W.	Calgary	210	1- 6-18
Hudyma, John	Pocahontas	207	1- 6-18
Jones, J. H.	Taber	214	1- 6-18
King, J. J	Nordegg	221	8- 6-18
Klejko, S	Coleman	213	1- 6-18
Lohmaier, P	Sheerness	238	15- 7-18
Marsh, William	Drumheller	230	8- 6-1 8
Mathewson, J.		236	22- 6-18
Mossey, Thomas	Lethbridge	237	5- 7-18
McDonald, G.	Drumheller	212	1-6-18
Reid, Edward		206	1- 6-18
Reid, Samuel	Beverly	211	1- 6-18
Redpath, J.	Wayne	208	1- 6-18
Talbot, W.	Drumheller	235	22- 6-18
Tennant, W. G.	Lethbridge	228	8- 6-18
Thomason, C.	Michel, B. C.	234	14- 6-18
Tisdale, J. R.	Nordegg	231	8- 6-18
Watson, A. G.	Calgary	215	1- 6-18
Wheatcroft, F.	Drumheller	225	8- 6-18
White, J. M.	Lethbridge	233	14- 6-18
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List of Names of Holders of Mine Surveyors' Certificates issued by the Government of the Province of Alberta during 1917 and 1918.

Name	Address	CFRT. No.	Date Issued
Brown, Thomas	Mountain Park	133	17-11-17
Cummings, Charles H	Brule Mines	135	3- 7-18
Gheur, Ernest	Nordegg	129	22- 2-17
Hamilton, Allan	Blairmore	131	7- 7-17
Johnson, Moses	Lethbridge	130	7- 7-17
Kidd, Gordon L. S	Calgary	132	10-10-17
Lindoe, Luke	Bellevue	136	3- 7-18
McDonald, John R	Frank	138	22- 2-17
Ritchie, David W		134 139	28- 6-18 11- 7-18
Sherwin, Paul M Smith, Thomas E Smith, James H	Coalhurst	127 137 140	22- 1-17 3- 7-18 1- 8-18
Wright, Edwin	Bankhead	138	11- 7-18

WAGES.

The scale of wages paid in the Province at the end of the year 1918 was the same as that paid at the end of 1917.

The general wage schedule now being paid is as follows:

OUT	OTD	T.T.	TX7 A	OTE
C 20 1 1 1 1	SIL	JH;	W A	Title.

	Per day	of	Hours
Bottom man	\$3.66	"	9
Slate pickers (boys)	1.76	"	9
Slate pickers (men)	3.16	"	9
Car oilers (men)	3.16	"	9
Car oilers (boys)	2.13	"	9
Tally boys	1.76	"	9
Teamsters	3.66	"	9 .
Blacksmiths	4.72	"	9
Blacksmiths' helpers	3.67	"	9
Carpenters	4.72	"	9
Carpenters' helpers	3.67	"	9
Power house engineers	5.35	"	11
Power house engineers	4.77	"	9
Power house engineers	4.19	"	8 .
Fan men	3.67	"	11
Hoisting engineers	3.97	"	8
Hoisting engineers	4.63		9
Hoisting engineers	5.35	"	11
Incline engineers	4.19	"	9
Tail rope engineers	4.46	"	8
Tail rope engineers	4.72	"	9
Endless rope engineers	4.08	"	9
Box car loader engineer	4.19	"	9-
Tipple engineer	4.19	"	9
Screen engine tender	$\frac{3.34}{4.19}$	"	9 . 9
Locomotive engineer	$\frac{4.19}{3.78}$	"	9
Locomotive switchman	3.66	"	8
Fireman	4.16	"	9
Fireman	4.72	"	11
Fireman's helper	3.34	"	9
Water tender	4.02	"	11
Railway car handler	3.28	"	9
Tipple dumper (man)	3.66	"	9
Tipple dumpers' helpers	3.33	"	9
Tipple dumper (boy)	2.13	"	9
Top cagers	3.33	"	9
Car Repairer	4.19	"	9
Car repairer's helper	3.67	"	9
Breaker engineer	4.19	"	9
Lampman (depending upon number of lamps and			•
skill of man)\$3.16 to	3.66	"	8
Lampman (depending upon number of lamps and			
skill of man)\$3.16 to	4.19	"	11
Machinists\$4.19 to	4.72	"	9
Machinist's helper	3.67	"	9
Ashman	3.16	"	9
Ashman	3.66	44	11
Wiper (man)	3.66	"	11
Coupler (man)	3.16	"	9
Coupler (boy)	2.13	"	9
Breaker oiler	3.66	"	10
Washer or tipple oiler	3.66	"	10
Breaker picker boss	3.66	"	9
Timber farmer	4.19	"	9
Timber sawyer	3.33	"	9
Box car shoveller	3.66	"	9
Breaker platform boss	3.66	**	9

THE MINES BRANCH

Wages-Continued.			
		ay of	Hours
Breaker platform men	3.28	"	9
Breaker screen men	$3.16 \\ 3.16$	"	9 9
Dirt bank men	3.16	"	9
Fan fireman	4.19	"	11
Stable men	3.16	"	9
Finisher after box car loader	3.16	"	9
All other labor not classified	3.16	"	9
BEE HIVE COKE OVENS			
Levelling and drawing (6½-ton charge per oven)	1.50		_
Levelling and drawing (5-ton charge per oven)	1.05		
Loading into box or open cars (over 20 tons per	- 00		
month) per ton Loading into box or open cars (less than 200 tons	.23		
per month) per ton	.21		
Steam locomotive engineer	4.19	**	9
Motorman	3.93	"	9
Lorryman	3.16	"	9
Plasterers	3.16	"	9.
Carters and cleaners	3.16	"	9 9
All other labor	3.16		9
BELGIAN COKE OVENS			
Ram engine man	4.19	"	9
Chargers	3.66	"	9
Clayers	3.66	"	9
DrawersLoaders	$\frac{3.66}{3.28}$	"	9 9
Doaders	3.20		ð
BRIQUETTE PLANT			
Engineer	4.73	"	11
Briquetter	4.86	"	11
Briquetter's helper	$\frac{4.19}{3.66}$	"	11 11
Laborers	3.66	"	11
INSIDE WAGES			
Shot lighter	4.08		0
Bratticeman	4.08	"	8 8
Bratticeman's helper	3.47	**	8
Timberman	4.08	"	8
Timberman's helper	3.47	"	8
Tracklayers	4.08	"	8
Tracklayer's helper	$\frac{3.47}{3.79}$	"	8 8
Locomotive engineer	3.79	"	8
Locomotive switchman	3.47	"	8
Drivers	3.79	"	8
Drivers (wet places)	4.08	"	8
Drivers (spike team	4.31	"	8
Couplers (men)	$\frac{3.47}{2.13}$	"	8 8
Switch boys\$1.76 to	$\frac{2.13}{2.13}$	"	8
Door boys	1.42	**	8
Fan boys\$1.42 to	2.13	"	8
Rope riders	3.79	"	8
Main and tail rope riders	4.08	"	8
PushersBuckers	$\frac{3.47}{3.47}$	"	8
Loaders	3.47	"	8
Miners	4.08	"	8
Miners (wet places)	4.60	"	8 ,
Miners' laborers (wet places)	3.88	"	8
Rock miners	4.60	"	8

Wages-Continued.			
	Per da	y of	Hours
Timber handlers	3.79	**	8
Cagers, slope and incline	3.47	"	8
Cagers, shaft	4.08	"	8
Machinemen	4.60	"	8
Machinemen's helpers	4.08	"	8
Pumpmen	3.47	"	8
Pumpmen (Galt mines)	3.97	"	8
Hoistmen\$3.79 to	4.08	"	8
Drivers (boys)\$2.13 to	3.47	"	8
Grippers	3.47	"	8
Grippers (boys)\$2.13 to	3.47	"	8
Pipe fitters' helpers	3.47	"	8
Pick carriers\$1.76 to	3.47	"	8
Clutchmen	4.08	"	8
Rollermen	3.47	"	8
All other labor not classified	3.47	"	8

Note: From August 1st, 1917, 20 cents per day; from December 1st, 1917, 34 cents per day; from April 1st, 1918, 54 cents per day; from August 1st, 1918, 79 cents per day, and from December 1st, 1918, 92 cents per day were paid to all persons in addition to the rates mentioned above.

Your obedient servant,

JOHN T. STIRLING,

Chief Inspector of Mines.

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